

Psychological Abstracts

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EXECUTIVE EDITOR
ALLEN J. SPROW

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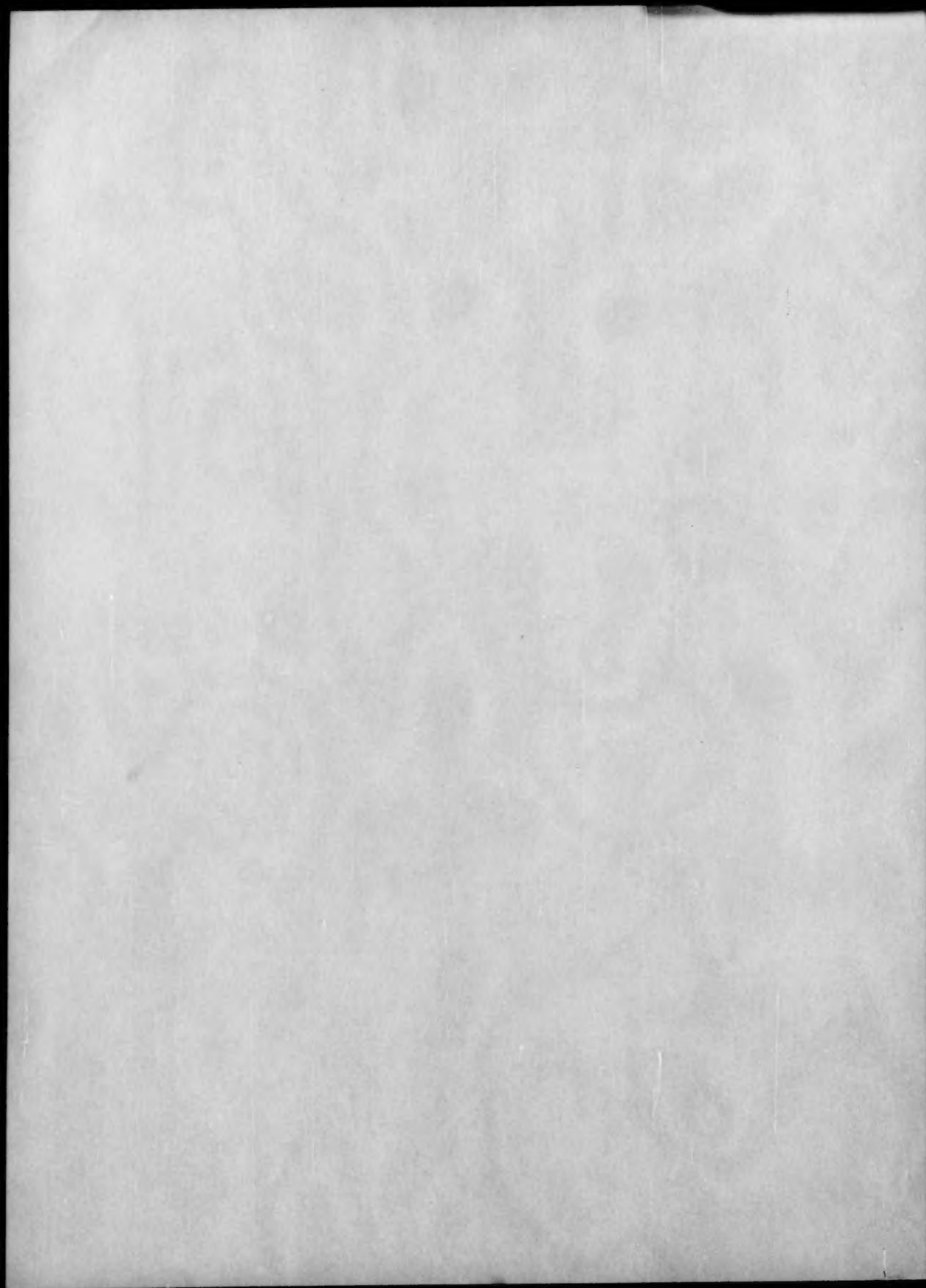
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GENERAL

2239. Campbell, Norman Robert. Science, imagination, and art. *Science*, 1957, 125, 803-806.—"Nothing could be more absurd than the attempt to distinguish between science and art. Science is the noblest of the arts and men of science the most artistic of all artists. For science, like art, seeks to attain esthetic satisfaction through the perceptions of the senses; and science, like art, is limited by the impositions of the material world on which it works."—*S. J. Lachman*.

2240. Feigl, Herbert, & Scriven, Michael. (Eds.) *Minnesota studies in the philosophy of science. Vol. I. The foundations of science and the concepts of psychology and psychoanalysis*. Minneapolis: University of Minnesota Press, 1956. xiv, 346 p. \$5.00.—12 papers on the philosophical foundations of psychology. (1) H. Feigl, Some major issues and developments in the philosophy of science of logical empiricism. (2) R. Carnap, The methodological character of theoretical concepts. (3) B. F. Skinner, Critique of psychoanalytic concepts and theories. (4) M. Scriven, A study of radical behaviorism. (5) A. Ellis, An operational reformulation of some of the basic principles of psychoanalysis. (6) A. Flew, Motives and the unconscious. (7) L. J. Cronbach and P. E. Meehl, Construct validity in psychological tests. (8) P. E. Meehl, Problems in the actuarial characterization of a person. (9) R. C. Buck, On the logic of general behavior systems theory. (10) P. E. Meehl and W. Sellars, The concept of emergence. (11) W. Sellars, Empiricism and the philosophy of mind, and (12) M. Scriven, A possible distinction between traditional scientific disciplines and the study of human behavior.—*H. Ruja*.

2241. Feigl, Herbert; Scriven, Michael, & Maxwell, Grover. (Eds.) *Minnesota studies in the philosophy of science. Vol. II. Concepts, theories, and the mind-body problem*. Minneapolis: University of Minnesota Press, 1958. xv, 553 p. \$7.00.—"This second volume of Minnesota Studies in the Philosophy of Science presents further results of the collaborative research . . . in the area of the philosophical and methodological problems of science in general, psychology in particular." Included are contributions on the unity of science and theory construction by P. Oppenheim, H. Putnam, C. G. Hempel, M. Scriven, A. Pap, W. Sellars, and H. G. Alexander. P. F. Strawson, K. Zener, and H. Feigl consider philosophical aspects of the mind-body problem. P. E. Meehl supplements his Vol. I paper. In the Appendix W. Sellars and R. M. Chisholm discourse on intentionality. Chapter synopses and extensive references are provided.—*H. P. David*.

2242. Jourard, Sidney M. *Personal adjustment: An approach through the study of healthy personality*. New York: Macmillan, 1958. xi, 462 p. \$5.50.—This textbook presents a description of what the healthy personality is and of what the factors are which help to determine it. There are chapters devoted to needs and healthy behavior, reality-contact, healthy emotional and sexual behavior, love, interpersonal behavior and relationships, the self-structure and its defense, conscience and guilt, the body and healthy personality, and personality therapy. The author states that the book was written primarily for use in college courses on mental hygiene or the psychology of adjustment. Notes, bibliographical references, and questions are provided to lead the serious student into the theoretical and experimental literature.—*W. A. Varvel*.

2243. Kretch, David, & Crutchfield, Richard S. *Elements of psychology*. New York: Knopf, 1958. xxi, 700 p. \$6.50.—A comprehensive and detailed exposition of the elements of psychology. Scattered throughout the text are 169 quarter- to half-page "boxes," some supplementing the main discussion in the text, some containing further illustrations, some providing demonstration experiments, but most presenting "research evidence for the generalizations stated in the text." The 25 chapters of the book are arranged, following an introductory chapter on The Study of Man, into 4 approximately equal parts: Perception (6 chapters), Motivation and Emotion (5 chapters), Adaptive Behavior (6 chapters), and The Individual (7 chapters). Each chapter includes several brief summaries, its own glossary, and suggestions for further reading.—*R. S. Harper*.

2244. Meerloo, Joost A. M. *Kos against Knidos; ambivalence as the psychiatric outlook on man*. *J. Hillside Hosp.*, 1957, 6, 67-86.—The 2 medical centers of ancient Greece, Kos and Knidos, were locked in a perpetual theoretical battle because they could not accept the existence of antinomies. Modern psychology fosters tolerance of coexisting truths and directs attention to subjective motivations. The physical, biological, psychological, and social fields join in the concept of ambivalence. Special attention is directed to the anal roots of ambivalence.—*C. T. Bever*.

2245. Miles, T. R. *On the difference between men and machines*. *Brit. J. Phil. Sci.*, 1957, 7, 277-292.—Two types of differences distinguish men from machines. The first type involves differences in appearance, physical make-up, and behavior. The second type is based upon man's ability to recognize external objects as external to the body-schema and somesthetic sensations as internal. Even though all differences of the first type were removed, differences of the second type would remain.—*P. E. Lichtenstein*.

2246. **Rapoport, Anatole.** Scientific approach to ethics. *Science*, 1957, 125, 796-799.—Certain ethical principles are inherent in scientific practice. These include "the conviction that there exists objective truth; that there exist rules of evidence for discovering it, that, on the basis of this objective truth, unanimity is possible and desirable; and that unanimity must be achieved by independent arrivals at convictions—that is, by examination of evidence, not through coercion, personal argument, or appeal to authority." The professional ethics of science "can be generalized to a complete ethical system which has a viability far greater than the existing ones [ethical systems]."—*S. J. Lachman*.

2247. **Szasz, Thomas S.** A critical analysis of the fundamental concepts of psychical research. *Psychiat. Quart.*, 1957, 31, 96-108.—In the realm of psychic research, there is still nothing that would deserve to be called a theory. This fact casts doubt on the reality of the entire structure of parapsychology. 26 references.—*D. Prager*.

2248. **Woodworth, Robert S.** Dynamics of behavior. New York: Holt, 1958. x, 403 p. \$5.00.—A review and recapitulation of the literature in the areas of motivation, perception, learning and problem solving and their "dynamic" interaction. The general theoretic formulation presented by the author is an extension of his earlier "Dynamic psychology" emphasizing organismic, intervening variables between stimulus and response, preparatory set, and the molar characteristics by which animals deal with their environments. 25-page bibliography.—*J. Arbit*.

THEORY & SYSTEMS

2249. **Blauner, Jacob.** Existential analysis: L. Binswanger's Daseinsanalyse. *Psychoanal. Rev.*, 1957, 44, 51-64.—Existentialism says that we find Being only as Dasein, as Human Being, and only proceed from what we find there. No other problem is felt to be as urgent as the problem of man himself. Man and the world belong together and are explained and understood only together. Human behavior must be understood in non-religious terms. "While we are lost in homelessness in the everyday world, love swings existence over into the super-worldliness of home." 16 references.—*D. Prager*.

2250. **Brach, Jacques.** Conscience et connaissance. (Conscience and consciousness.) Paris: Marcel Rivière, 1957. 241 p. 750 fr.—Leaving conscience to the metaphysician, the author seeks only physiological correlates in animals and humans. Part I treats of the conscience and the psychism in the material universe; Part II, in instruments of consciousness and of adaptation, mental and neurocortical associations; Part III, the principal reactions of mechanical systems and of living organisms; Part IV partly unconscious and instinctive, partly conscious and intentional behavior; Part V various degrees of consciousness, symbolization, the conscious and superior language of psychism, comprehension, intelligence.—*G. Rubin-Rabson*.

2251. **Bullock, D. H.** Harlow's "mice, monkeys, men, and motives": A critique. *Psychol. Newslett.*, N. Y. U., 1957, 8, 114-119.—An analysis is made of Harlow's position concerning motivational factors in behavior and many deficiencies are pointed out. A plea is made for a resolution of the issues involved

to be pursued in the laboratory rather than in theoretical attacks.—*M. S. Mayner*.

2252. **Cantor, Gordon N., & Cromwell, Rue L.** The principle of reductionism and mental deficiency. *Amer. J. ment. Defic.*, 1957, 61, 461-466.—"The present paper is an attempt to examine structural reductionism in the light of certain principles within the philosophy of science." The argument offered is "that reductionism—i.e., that brand of reductionism objected to in this paper—has no value in mental deficiency or in any other area involving scientific exploration of the human organism."—*V. M. Staudt*.

2253. **Dale, Paul W.** Mathematical logic and the nature of reasoning. *Psychiat. Quart.*, 1957, 31, 1-9.—The basic mathematical postulates have a strictly human origin. Mathematics is a method for manipulating any ideas. Theorems are discovered by a primitive, nonlogical mental process and are communicated to others by deductive reasoning. The reasoning "canned" in mathematics is as applicable to psychiatry as to any other science. Mathematical techniques may catalyze psychiatry to great advances.—*D. Prager*.

2254. **Herbst, P. G.** Situation dynamics and the theory of behavior systems. *Behav. Sci.*, 1957, 2, 13-29.—Identified and quantified variables in terms of which the behavior of an individual as a member of a group can be described. The variables have to do with degrees of activity, of emotional content, and of external pressures involved in various forms of behavior. Quantitative relationships were derived and put to experimental test. Support for the model is noted. 20 references.—*J. Arbit*.

2255. **Lebedev, M. P.** Materiia i soznanie. (O zakonornostiakh vulgarnogo materializma.) (Matter and consciousness. (On the principles of vulgar materialism.)) *Vop. Filos.*, 1956, No. 5, 70-84.—A criticism is leveled at "vulgar materialists," that is, those who, in their attempt to make the psyche material, obliterate the "Leninist distinction" between the objective and the subjective, between the object "reflected in consciousness" and the "ideal copy" of the object, between the psyche and its "material substratum." The material and the ideal, as the reflection of the former, both exist. The latter is illuminated by means of Pavlovian theory which permits consciousness, as it reflects "social-way-of-life," to rest on a material substratum; all the while not being reducible to it.—*I. D. London*.

2256. **Lückert, Heinz-Rolf.** Konflikt-Psychologie: Einführung und Grundlegung. (Conflict-psychology: Introduction and principles.) Basel, Switzerland: Ernst Reinhardt, 1957. 592 p. Sw.Fr. 31.—In an extensive attempt to synthesize psychoanalytic concepts with the findings of experimental and phenomenological psychology, the author develops a dynamic personality theory called "Conflict-psychology." Part A of the volume covers "elementary processes," including needs, motivation, realization, frustration, regulation, and reduction. Part B considers more "complex constellations" and the nature of conflict. 603 references.—*H. P. David*.

2257. **Miller, James G.** Mental health implications of a general behavior theory. *Amer. J. Psychiat.*, 1957, 113, 776-782.—The present status in the

development of a general behavior systems theory is described as it has been worked out at the Mental Health Research Institute at Ann Arbor. 4 propositions derived from this conceptual framework are stated and discussed and a program of clinical and laboratory researches is outlined which may help to bridge gaps in our present knowledge.—N. H. Pronko.

2258. Muuss, Rolf. **Existentialism and psychology.** *Educ. Theory*, 1956, 6, 135-153.—The premises of Existentialist philosophy are presented, with special consideration of the views of Søren Kierkegaard, Karl Jaspers, and Jean-Paul Sartre. Some of the characteristics of this position are that it is dynamic, humanistic, individualistic, voluntaristic, a "radical subjectivism." The method is phenomenological, concerned with the concrete character of "beingness" and with such special experiences as death, anger, suffering, conflict. Sociology, psychology, and anthropology "comprehend something of the human but not the human totality." Points of contrast are developed between Sartre's "Existential Psychoanalysis" and the classical position of Freud. 20-item bibliography.—A. E. Kuenzli.

2259. Scheffler, Israel. **Explanation, prediction, and abstraction.** *Brit. J. Phil. Sci.*, 1957, 7, 293-309.—The author holds that explanation and prediction are structurally distinct and that "they require no abstract, idealistic entities as objects." When explanation and prediction are associated with control they are "subsidiary to the primary concern of science with comprehensive relationships among events."—P. E. Lichtenstein.

METHODS & APPARATUS

2260. Allison, R. E. **Audiometers and their use.** *Noise Control*, 1957, 3, 40-43; 90.—The author reviews the various types of audiometers in general use. Among the types of audiometers considered are those for rapid screening within broad categories for testing large numbers of people; simultaneously; for automatic recording; for the testing of speech reception; and for medical diagnosis.—I. Pollack.

2261. Asafov, B. D., & Smirnov, V. M. **Registratsiia rechevoi i graficheskoi uslovnnykh reaktsii pri issledovanii dermoleksii, fonoleksii, kinestezioleksi.** (Registration of speech and writing conditioned reactions in the study of dermolexia, phonolexia, and kinesthesiolexia.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 333-338.—Devices are described for the registration of conditioned speech and writing reactions in a study where letters are spelled by means of: (1) tracing on the skin; (2) a moving sound source in the air; and (3) passive movement of the subject's hand.—I. D. London.

2262. Bachem, Albert. **The modified Fechner-Weber law as a complex law of dose-action.** *Amer. J. Psychol.*, 1956, 69, 588-603.—A comparison of the results and theories in psychophysics with those dealing with the course of dose-action reveals a high degree of similarity between these two areas. This leads to the suggestion that the Fechnerian law, when given a physiological interpretation, "represents a particular, complex dose-action law."—R. H. Waters.

2263. Dudek, Frank J., & Baker, Katherine E. **The constant-sum method applied to scaling subjective dimensions.** *Amer. J. Psychol.*, 1956, 69,

616-624.—The constant-sum method of scaling was applied to the relative roughness of sandpapers and preferences for neckties. The degree of consistency of the scale-values obtained indicated that something other than the ordinal values of the items was measured, even though "a true ratio-scale may not have been met fully."—R. H. Waters.

2264. Duffy, Michael L., & Price, G. E. **A continuous drinking-recorder for small animals.** *Amer. J. Psychol.*, 1956, 69, 664-666.—"The apparatus was designed to obtain direct, continuous records of drinking over prolonged periods."—R. H. Waters.

2265. Jeffreys, Harold. **Scientific inference.** (2nd ed.) Cambridge, England: University Press, 1957. viii, 236 p. \$4.75.—The chief guiding principle of both scientific and everyday knowledge is that "it is possible to learn from experience and to make inferences from beyond the data directly known by sensation." Scientific method "can be understood if and only if a theory of epistemological probability is provided. . . . The fundamental problem of this work is the question of the nature of inference from empirical data so as to predict experiences that may occur in the future." Contents: I. Logic and scientific inference; II. Probability; III. Sampling; IV. Errors; V. Physical magnitudes; VI. Mensuration; VII. Newtonian dynamics; VIII. Light and relativity; IX. Miscellaneous questions; X. Statistical mechanics and quantum theory.—S. J. Lachman.

2266. Jones, F. Nowell. **A forced-choice method of limits.** *Amer. J. Psychol.*, 1956, 69, 672-673.—". . . a method of limits consisting of ascending series only" can be satisfactorily employed in research on taste or smell if one forces "O to indicate which of four stimulus-presentations, at each ascending level, actually contains the taste or odor to be detected."—R. H. Waters.

2267. Kalinin, A. P. **Reduktornoe upravlenie kormushkol.** (Reductor control of feeding racks.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 146-147.—A device for controlling feeding racks in a laboratory is described which is notable for (1) noiselessness of rotation of the cup-bearing disc, and (2) simplicity and ease of construction of the device.—I. D. London.

2268. Kudriavtsev, A. A., & Lozhkin, N. I. **K metodike izucheniia obonianiia u korov.** (On methods for studying olfaction in cattle.) *Fiziol. Zh. SSSR*, 1956, 42, 916-918.—Apparatus is described which may be used in conditioned-reflex studies involving olfaction with cows as subjects.—I. D. London.

2269. Larionov, V. P. **Novyi tip vosprinimaiushchei i registriruiushchei kapsuly.** (New type of recording membrane-receptor.) *Fiziol. Zh. SSSR*, 1956, 42, 913-914.—The construction and uses of a new type of recording membrane-receptor, useful in psychophysiological research, are discussed.—I. D. London.

2270. Lawless, Richard H. **Mazes for small aquatic animals.** *Amer. J. Psychol.*, 1956, 69, 667.—A description of the construction of lucite plastic mazes suitable for protozoans and other small aquatic animals is presented.—R. H. Waters.

2271. McGaugh, J. L., & Petrinovich, Lewis. **An apparatus for the study of instrumental learning in the rat.** *Amer. J. Psychol.*, 1956, 69, 660-663.

—The device described is designed to overcome "two major shortcomings" of many lever-pressing instruments. It enables the study "of the acquisition of a simple instrumental response as well as of its subsequent performance." It is essentially a circular board carrying food wells which is tripped by the animal shuttling back and forth over a hinged board forming the floor of a box.—*R. H. Waters.*

2272. Mogilevskii, A. IA., & Kobozov, G. V. *Integral'nyi stupenchatyi salivograf.* (Integral stepwise salivograph.) *Zh. vyssh. nervn. Deiatel'*, 1955, 5, 912-915.—Principles are given of the construction and use of a recording device which not only can be used for measuring volume and number of droplets of saliva secreted per unit time, but which can be employed for "graphic registration of perfusion of isolated organs and the study of the dynamics of muscular contractions, urinary secretion, and other irregularly flowing dynamic processes in the organism."—*I. D. London.*

2273. Newbury, Edward. Automatic measurement of general activity in time-units. *Amer. J. Psychol.*, 1956, 69, 655-659.—A "simple magnetic-relay system" is described by which various features of general activity level may be measured. "The system can be used with any type of cage, stabilometer, bed, or situation so designed that the activity of the animal will produce electrical contact."—*R. H. Waters.*

2274. Ross, Sherman; Ginsburg, Benson E., & Denenberg, Victor H. The use of the split-litter technique in psychological research. *Psychol. Bull.*, 1957, 54, 145-151.—The assumption that all genetic factors are held constant in the use of the split-litter technique is examined. On the basis of the available research evidence it can be concluded that within any one litter there will probably be some genetic variation. A decision as to the advisability of using the technique must depend upon whether the control gained over some genetic and environmental factors within the litter compensate for the variability introduced by the unknown genetic factors and other variable factors present within the litter environment.—*W. J. Meyer.*

2275. Salzinger, Kurt. Techniques for computing shift in a scale of absolute judgment. *Psychol. Bull.*, 1956, 53, 394-401.—The establishment of a frame of reference within which single stimuli from a group of stimuli are placed in specific categories essentially describes the method of single stimuli. A modification of the frame of reference such that systematic changes in stimulus values and categorizations occur defines the notion of "shift." 7 different techniques for measuring degree of shift are reviewed. 2 further techniques developed by the author are described in detail. Data comparing these approaches on a sample of normals and schizophrenics are presented.—*W. J. Meyer.*

2276. Volokhov, A. A., Kobyshev, V. I., & Novikova, E. G. Metodika registratsii dykhanii pri pomoshchi termistora. (A method for the registration of respiration with the aid of a thermistor.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 342-345.—Details of a thermistor are given which facilitates accurate registration of animal respiration under conditions of free movement. The method, utilizing this device, is especially useful in the study of the "respiratory com-

ponents of the orienting and motor conditioned reflexes" as well as of the "autonomic components of reflex reactions in the process of ontogenesis."—*I. D. London.*

(See also Abstracts 2480, 2963)

NEW TESTS

2277. Collier, Calhoun Crofford. The development and evaluation of a non-computational mathematics test for grades 5 and 6. *Dissertation Abstr.*, 1957, 17, 1027-1028.—Abstract.

2278. Kuhn, Donald Charles. Development of an instrument for the measurement of overt behavior of patients in a neuropsychiatric hospital. *Dissertation Abstr.*, 1957, 17, 1126.—Abstract.

2279. Woehlka, Arnold Benjamin. The construction and evaluation of the International Morse Code Selection Test. *Dissertation Abstr.*, 1957, 17, 1023.—Abstract.

STATISTICS

2280. Adler, Leta McKinney. A modification of Kendall's tau for the case of arbitrary ties in both rankings. *J. Amer. statist. Ass.*, 1957, 52, 33-35.—"In certain correlation problems where the number and frequency of tied rankings are regarded as arbitrary . . . the criteria for perfect correlation of standard coefficients of correlation may be in appropriate. . . . In cases for which ties are considered arbitrary, the following criteria for perfect correlation are suggested: pairs of ties can be arranged so that all ties in each ranking are grouped together and sets of tied scores are in natural order, individuals tied in one ranking not necessarily being tied in the other ranking. . . . It is the purpose of this paper to present a modification of Kendall's tau which produces a correlation coefficient of unity under the above conditions."—*C. V. Riche.*

2281. Alf, Edward Franklin, Jr. Configurational scoring and prediction. *Dissertation Abstr.*, 1957, 17, 887.—Abstract.

2282. Askovitz, S. I. A short-cut graphic method for fitting the best straight line to a series of points according to the criterion of least squares. *J. Amer. statist. Ass.*, 1957, 52, 13-17.—"A simple technique is presented for obtaining without calculation the best fitting line according to the least squares criterion, provided the points are equally spaced horizontally. A graphic measure of residual variability [dispersion of the points about the line] is also derived."—*C. V. Riche.*

2283. Bessière, F., & Legrand, P. Sur les critères servant à étudier les échelles de Guttman. (On the criteria used in the study of Guttman scales.) *Bull. Cent. Etud. Rech. psychotech.*, 1956, 5, 395-406.—It is shown that the reproducibility criterion is not enough to prove that a scale is good. The discussion which follows tends to question the whole value of the notion of error and to suggest the investigation of numerical criteria which will be more adequate than the reproducibility coefficient. English and Spanish summaries.—*V. Samua.*

2284. Bross, Irwin D. J., & Kasten, Ethel L. Rapid analysis of 2×2 tables. *J. Amer. statist. Ass.*, 1957, 52, 18-28.—For any 2×2 table with the

following characteristics: "(1) The two samples to be compared are of the same order of magnitude. . . (2) The quantity T (i.e., the total number of cases in both series with a given attribute) is small relative to the total number of cases in both series . . . [say] . . . less than 20% of $N_1 + N_2$. . . (3) the value of T . . . [is] . . . less than 50." Nomographs are presented which allow the determination of statistical significance, using for each 2×2 table only the ratio, $P = N_1/(N_1 + N_2)$ and the value of T . More complete tables, which will vitiate the third restriction, are promised.—C. V. Riche.

2285. Clemans, William Vance. An analytical and empirical examination of some properties of ipsative measures. *Dissertation Abstr.*, 1957, 17, 887-888.—Abstract.

2286. Cohen, Jacob. An aid in the computation of correlation based on Q sorts. *Psychol. Bull.*, 1957, 54, 138-139.—"Researchers in the area of clinical-personality-social have needed frequently to compute Pearsonian product-moment coefficients of correlation from Q arrays in large numbers." The standard computing methods are inefficient in this situation. "The purpose of this note is to present a quick method for computing such correlations."—W. J. Meyer.

2287. Cohen, John, & Hansel, Mark. Risque et jeu; probabilités subjectives. (Risk and gambling; subjective probability.) Neuchâtel, Switzerland: Delachaux et Niestlé, S. A., 1957. 108 p. Fr. S. 5.50.—The theory of subjective probability is treated in 8 chapters: introduction, subjective prediction, sampling, the language of uncertainty, intensity of conviction, taking a risk, estimation of frequencies, subjective probabilities in gambling.—G. Rubin-Rabson.

2288. Coombs, C. H., & Kao, R. C. Nonmetric factor analysis. *Bull. Dep. Engng Res. Univer. Mich.*, 1955, No. 38, vii, 63 p.—A presentation of some new multidimensional methods for dealing with data collected by the Method of Single Stimuli for which unidimensional solutions such as scalogram analysis and latent-structure analysis are not appropriate. After an introduction, 4 chapters are devoted to the mathematical construction of the models. Interspersed with the mathematics are interpretive paragraphs to "facilitate communication with both mathematicians and social scientists" and completely worked-out examples. Discussion and summary chapters together with 25 references.—R. L. McCornack.

2289. Cox, Gertrude M. Statistical frontiers. *J. Amer. statist. Ass.*, 1957, 52, 1-12.—This is a presidential address indicating, in a somewhat allegorical manner, some of the unsolved problems of statistics. The major non-technical problem raised is the need for more statisticians. The technical issues raised are many and varied.—C. V. Riche.

2290. Feller, William. An introduction to probability theory and its applications. Vol. 1. (2nd ed.) New York: John Wiley, 1957. xv, 461 p. \$10.75.—In this first volume of the second edition (see 25: 60), the author "attempts to treat probability theory as a self contained mathematical subject rigorously, avoiding non-mathematical concepts. At the same time, the book tries to describe the empirical background, and to develop a feeling for the variety of practical applications." Emphasis is placed on the theory of recurrent events, waiting times, chain reactions, infinitely divisible distributions, limit

theorems, fluctuation theory, stochastic processes, random walks, and Markov chains." 4 chapters are devoted to the basic notions of probability theory which serve.—R. Holroyd.

2291. Hills, John R. Within-groups correlations and their correction for attenuation. *Psychol. Bull.*, 1957, 54, 131-133.—"Situations frequently occur in which an investigator obtains the correlations between the same two variables in several groups of subjects and wants to obtain some over-all estimate of the degree of correlation between the two variables." Several techniques for evaluating such statistical problems are presented.—W. J. Meyer.

2292. Holloway, Clark, Jr. A systematic method of finding defining contrasts. *J. Amer. statist. Ass.*, 1957, 52, 46-52.—In a 2^n factorial experiment there will be $2^n - 1$ main effects and interactions. Inasmuch as information on high-order interactions often either is not desired or is negligible, it is useful to cut down the number of sub-groups by employing fractional replication, leading to a 2^{n-p} factorial experiment. The trick in using fractional factorials is to design the experiment in such a way that the effects or interactions of interest are confounded with those which are not of interest and which are expected to be small. All of the confounding will be determined by the choice of the set of "defining contrasts." This paper describes an objective and systematic method for choosing these contrasts.—C. V. Riche.

2293. Horst, Paul. The uniqueness of configural test item scores. *J. clin. Psychol.*, 1957, 13, 107-114.—The author presents a theoretical formulation and empirical demonstration for computing multiple r 's based on the configural scoring of test items. For the six-item example utilized configural scoring by item pairs was of little value since the multiple r between the sum of items and the sum of cross-products of pairs of items approached 1.00. However, scoring by item-triads, etc., yielded lower r 's with total item scores suggesting that configural scoring might yield knowledge beyond that afforded by correlations based on sums of items alone.—L. B. Heathers.

2294. Huddleston, Edith M. Test development on the basis of content validity. *Educ. psychol. Measmt.*, 1956, 16, 283-293.—Utilizing a number of examples, Huddleston demonstrates the value of content validity in guiding the test development process. Examples are presented from the areas of reading, science, history, and general educational development. Content validity depends more on the objectives of instruction than the content.—W. Coleman.

2295. Humphreys, Lloyd. The normal curve and the attenuation paradox in test theory. *Psychol. Bull.*, 1956, 53, 472-476.—The attenuation paradox (lack of a monotonic relationship between reliability and validity) becomes more meaningful if the usual assumption of a normal continuous distribution in the criteria variable is dropped. On the basis of present day tests these assumptions are highly questionable. The author concludes that "there is no paradox if the criterion distributions can assume any shape." A sequence of issues to be considered in the construction of tests is presented.—W. J. Meyer.

2296. Jackson, J. Edward, & Fleckenstein, Mary. An evaluation of some statistical techniques used in the analysis of paired comparison data. *Bio-*

metrics, 1957, 13, 51-64.—An evaluation and comparison of four paired comparison methods: the Thurstone-Mosteller method, the Bradley-Terry method, the Scheffé method, and the Morrissey-Gulliksen method. The work of additional writers such as Kendall is also discussed. All four methods gave approximately the same response scales, but each had advantages for specific situations.—R. L. McCornack.

2297. Jones, Marshall B. An addition to Schaeffer and Levitt's "Kendall's tau." *Psychol. Bull.*, 1957, 54, 159-160.—"The purpose of this note is to append a brief description of the statistic in question to Schaeffer and Levitt's [see 32: 2310] review."—W. J. Meyer.

2298. Kramer, Clyde Young. Extension of multiple range tests to group correlated adjusted means. *Biometrics*, 1957, 13, 13-18.—Duncan's new multiple range test is extended to adjusted means that are correlated. The method is equally applicable to the tests of Keuls, Newman and Tukey. A general method for adjusted means with heterogeneous variances and covariances is described. Applications of the method are made to covariance analysis, balanced incomplete block designs, lattices, partially balanced designs and to unequal numbers of replications.—R. L. McCornack.

2299. Kullback, S. An application of information theory to multivariate analysis: II. *Ann. math. Statist.*, 1956, 27, 122-146.—"Certain results of information theory are applied to some problems of multivariate analysis, including the multivariate linear hypothesis and the hypothesis of homogeneity of covariance matrices. A discussion of certain related linear discriminant functions is also included. Some asymptotic distributions on the null hypothesis are derived. Related problems, still under investigation, are mentioned. The procedures are based on the principle of maximizing information." 33 references.—P. Ratoosh.

2300. Lennson, Roger T. Assumptions underlying the use of content validity. *Educ. psychol. Measmt*, 1956, 16, 294-304.—Content validity is defined as "... the extent to which a subject's responses to the items of a test may be considered to be a representative sample of his responses to a real or hypothetical universe of situations which together constitute the area of concern to the person interpreting the test." Three assumptions underlying the use of content validity are discussed at some length.—W. Coleman.

2301. Li, Jerome C. R. Introduction to statistical inference. Ann Arbor, Mich.: Edwards Brothers, 1957. xiii, 553 p. \$7.50.—A non-mathematical exposition of the theory of statistics written for experimental scientists with a high school algebra background. Used in a one-year course, the book utilizes a series of sampling experiments to verify theorems. The 24 chapters are divided into three parts by two review chapters. The first part deals with statistical inference and four sampling distributions; the second with analysis of variance and regression; and the third with non-parametric methods.—R. L. McCornack.

2302. McGlothlin, William H. Stability of choices among uncertain alternatives. *Amer. J. Psychol.*, 1956, 69, 604-615.—A statistical analysis of 9,605 horse-races was undertaken "to obtain informa-

tion about the stability of decision-making behavior over a series of risk-taking events." A relatively stable tendency exists for the wagers "to accept probability-prize combinations whose expected values were less for low-probability wagers than for high ones." The operation of "variance-preferences" disturbs this stability and thus the study has implications for decision-making models.—R. H. Waters.

2303. McHugh, Richard B. The interval estimation of a true score. *Psychol. Bull.*, 1957, 54, 73-74.—The customary technique for determining the standard deviation of a hypothetical distribution of obtained scores for a single respondent is given by $S_X = S\sqrt{1-r}$. This technique is satisfactory if "for the norm group of reference, r is not low and if the obtained score X of the subject concerned is not an extreme deviate from the mean X , of the norm group."—W. J. Meyer.

2304. Michael, William B., Jones, Robert A., & Perry, Norman C. An abac for estimating certain systemic error. *Calif. J. educ. Res.*, 1957, 8, 83-86.—The abac presented facilitates the determination of the absolute amount of systematic error, given the item-criterion correlation and the level of item difficulty (determined on the basis of the average of the performances by the upper and lower 27 per cent of the group).—T. E. Newland.

2305. Mitra, Sujit Kumar. Tables for tolerance limits for a normal population based on sample mean and range or mean range. *J. Amer. statist. Ass.*, 1957, 52, 88-94.

2306. Payne, R. W., & Jones, H. Gwynne. Statistics for the investigation of individual cases. *J. clin. Psychol.*, 1957, 13, 115-121.—Several statistics useful in interpreting the data of individuals are discussed. These are the standard deviation of differences, the standard error of measurement of differences, and the standard error of estimate related to retest data.—L. B. Heathers.

2307. Runkel, Philip J., Smith, J. E. Keith, & Newcomb, Theodore M. Estimating interaction effects among overlapping pairs. *Psychol. Bull.*, 1957, 54, 152-158.—"This paper offers a method, given a collection of scores obtained by observing pairs of persons, of constructing scores in which the contributions of individuals are held constant so that the variability among the resulting 'interaction scores' may be attributed to the conditions specifying the obtained pair-scores and not to characteristics associated with the persons individually."—W. J. Meyer.

2308. Sarhan, A. E., & Greenberg, B. G. Tables for best linear estimates by order statistics of the parameters of single exponential distributions from singly and doubly censored samples. *J. Amer. statist. Ass.*, 1957, 52, 58-87.

2309. Savage, I. Richard. On the independence of tests of randomness and other hypotheses. *J. Amer. statist. Ass.*, 1957, 52, 53-57.—"In this paper it will be pointed out that for random samples, i.e., independently and identically distributed random variables, many of the non-parametric tests of randomness are independent of 'symmetric' tests of hypotheses. This result can be used to test both the 'random' and 'parametric' parts of a hypothesis with procedures having known significant levels."—C. V. Riche.

2310. Schaeffer, Maurice S., & Levitt, Eugene E. Concerning Kendall's tau, a nonparametric correlation coefficient. *Psychol. Bull.*, 1956, 53, 338-346.—There are a number of circumstances in which the use of the Pearson product-moment correlation is inappropriate and a rank order procedure (Tau) is required. The advantages of Tau over Spearman's rho technique are discussed. Definitional and computational formulae of Tau, tests of significance, the confidence limits of Tau, and the relationship between Tau and the product-moment correlation, are presented. Additional useful formulae are included.—W. J. Meyer.

2311. Scheffé, Henry. A "mixed model" for the analysis of variance. *Ann. math. Statist.*, 1956, 27, 23-36.—"A 'mixed model' is proposed in which the problem of the appropriate assumptions to make about the joint distribution of the random main effects and interactions is solved by letting this joint distribution follow from more basic and 'natural' assumptions about the cell means. The expectations of the mean squares ordinarily calculated turn out, with suitable definition of the variance components, to have the same values as those usually found in more restrictive models, and some of the customary tests and confidence intervals are justified, but some aspects appear to be novel. For example, the over-all test found for the fixed main effects and the associated multiple-comparison method require Hotelling's T^2 ." 14 references.—P. Ratoosh.

2312. Schreiber, Robert J. Estimates of expected value as a function of distribution parameters. *J. exp. Psychol.*, 1957, 53, 218-220.—"Subjects were asked to estimate the next amount of money they would draw from a bowl given four previous drawings. The results indicate that: (a) the estimates cannot be differentiated from a normal distribution; (b) the mean of the estimates seems to be an unbiased estimator of the mean of the distribution from which the drawings are made; and (c) the dispersion of the estimates increases with the dispersion of the four previous drawings."—J. Arbib.

2313. Stanley, J. C. The reliability of differences. *Psychol. Newsltr. N. Y. U.*, 1957, 8, 198-200.—A coefficient of equivalence for differences that can be easily calculated when the 2 appropriate mean squares from an analysis of variance are available is developed.—M. S. Mayzner.

2314. Stanley, Julian C. Additional "post mortem" tests of experimental comparisons. *Psychol. Bull.*, 1957, 54, 128-130.—Scheffé's technique for assessing all possible combinations of mean comparisons after the analysis of variance is judged to be overly conservative for most comparisons of interest to psychologists. Techniques yielding more sensitive tests of comparisons are presented.—W. J. Meyer.

2315. Sutcliffe, J. P. A general method of analysis of frequency data for multiple classification designs. *Psychol. Bull.*, 1957, 54, 134-137.—There are many research areas for which the data can only be obtained in terms of counts or frequencies within specified categories rather than in terms of measures. The techniques of analysis of variance are not amenable to this kind of data. However, the use of "multiple contingency analysis" permits the investigator to make use of factorial designs even though his data are in the form of frequencies. The development

of the method and an illustrative problem are presented.—W. J. Meyer.

2316. Taylor, W. B. Incomplete block designs with row balance and recovery of inter-block information. *Biometrics*, 1957, 13, 1-12.—Balanced incomplete block (BIB) designs have the advantage that the number of treatments per block is less than the number of treatments to be tested, while in Youden Squares the number of blocks equals the number of treatments with every treatment occurring once in each row. A class of BIB designs involving partial balancing of the rows is discussed along with the conditions of balance and a work example.—R. L. McCornack.

2317. Tiffin, Joseph, & Hudson, Terrance W. Comparison of sequential and conventional item analysis when used with primary groups varying in size and composition. *Educ. psychol. Measmt.*, 1956, 16, 333-344.—Sequential item analysis was compared with Kelly's D-Value Method using an original test on engine lathe operation given to 141 machinists and 212 vocational students. Items selected through sequential analysis were just as reliable and valid as items selected by the D-Value method. Sequential analysis permitted the use of a smaller primary group. Primary groups with restricted ranges used for item analysis "... produced tests as valid and reliable as those resulting from item analyzing the primary groups representing a wider range of talent."—W. Coleman.

2318. Towner, Leonard W. Reliability coefficients obtained under varying degrees of deviation from theoretically perfect conditions. *Educ. psychol. Measmt.*, 1956, 16, 345-351.—A 150 item cancer knowledge examination was administered to 1,600 medical students evenly divided into 4 class levels. A comparison was made of reliability coefficients computed as follows: (1) matched items subtests, odd-even split halves; (2) Kuder-Richardson 20; (3) Kuder-Richardson 21; (4) Guttman L_1 ; and (5) Guttman L_8 . For the 32 r's computed for the different methods and class level, the largest was .87 and the lowest .81. The author concludes from the amount of similarity that K-R 21 might be the most satisfactory way of determining reliability with the Guttman L_4 to be used as a possible check.—W. Coleman.

2319. Trites, David K. Graphic determination of significance of 2×2 contingency tables. *Psychol. Bull.*, 1957, 54, 140-144.—There are several techniques available for determining the significance of differences in proportions, or frequencies in the 2×2 contingency tables. All of these techniques have their limitations. A method is proposed which overcomes some of these limitations. The method is applicable for the situation where the two samples being compared are independently selected and contain the same number of Ss.—W. J. Meyer.

2320. von Mises, Richard. Probability, statistics and truth. (2nd ed.) New York: Macmillan, 1957. ix, 244 p. \$5.00.—This edition is a translation of the third German edition which was revised by the author in 1951. Changes consist essentially in the author's omission of some of the discussions of the early controversies regarding his theory and additions: the concept of randomness is reconsidered; systematic consideration is given recent work concerned with the basic definitions of probability theory; the Second

Law of Large Numbers is enlarged; and comments are added on the testing of hypotheses.—*A. J. Sprow.*

2321. Webster, Harold. **Transformed statistics for use in test construction.** *Psychol. Bull.*, 1956, 53, 488-492.—This paper draws together the several formulae which have been developed for determining item-test and/or item-criterion statistics which utilize highly efficient grouping. Grouping transformations have been found to be relatively efficient and precise enough for general use. Departures from normality because of grouping transformations are not extreme enough to invalidate results.—*W. J. Meyer.*

2322. Weinberg, George H., & Tripp, Clarence A. **A simplification of the sign test.** *Psychol. Bull.*, 1957, 54, 79-80.—The sign test has become one of the most frequently used tests of significance. When $\alpha = .05$ and $N \geq 25$ there is a more simplified test of significance. This test of significance and a technique for determining what sample size would be needed to attain significance are developed.—*W. J. Meyer.*

2323. Whitcomb, Milton Arlo. **Evaluation of a method for the construction of factor-pure aptitude tests.** *Dissertation Abstr.*, 1957, 17, 907.—Abstract.

2324. White, Benjamin, & Saltz, Eli. **Measurement of reproducibility.** *Psychol. Bull.*, 1957, 54, 81-99.—"Reproducibility" refers to "the degree to which one can reproduce a subject's entire response pattern from a knowledge of his total score and the order of difficulty of the items." The purpose of this article is to examine some of the available techniques for assessing "reproducibility," to evaluate these techniques, and to indicate the relationships between these techniques and the concept of reliability. 20 references.—*W. J. Meyer.*

2325. Yunker, Harold E. **A guide to statistical calculations.** New York: G. P. Putnam's Sons, 1958. vii, 95 p. \$1.95.—A guide designed to help non-mathematically oriented students perform elementary statistical calculations. Each is outlined in a series of discrete steps and is largely self-contained. Frequency distributions, measures of central tendency and dispersion, correlation, transformations and hypothesis testing are covered.—*R. L. McCornack.*

REFERENCE WORKS

2326. Bry, Ilse, et al. **Mental health book review index: Psychology, psychiatry, psychoanalysis.** *Psychol. Newsltr., N. Y. U.*, 1957, 8(6), Suppl. No. 4. 21 p.—Continuation of indexes reviews of books in the field of mental health appearing in 72 American and English journals in the 3 title areas.—*M. S. Mayzner.*

2327. National Association for Mental Health. **Directory of adult psychiatric out-patient facilities in England and Wales, 1957.** London: Author, 1957. 80 p.

2328. Taylor, Norman Burke, & Taylor, Allen Ellsworth. (Eds.) **Stedman's medical dictionary.** Baltimore: Williams & Wilkins, 1957. xlv, 1,656 p. \$12.50.—This 19th revised edition contains "words used in medicine with their derivations and pronunciation including dental, veterinary, chemical tables of titles in general use, the terms sanctioned by the Basle Anatomical Convention; the new British ana-

tomical nomenclature; nomina anatomica, revised by the Fifth International Nomenclature Congress of Anatomists; pharmaceutical preparations official in the U. S. and British pharmacopoeias or contained in the national formulary; biographical sketches of figures in the history of medicine."—*J. C. Holroyd.*

ORGANIZATIONS

2329. Holsopple, James Q., Jr. (Ed.) **American Psychological Association 1958 directory.** Washington, D. C.: American Psychological Association, 1958. xxxii, 806 p. \$6.00.—Contains lists of the 16,644 members and fellows arranged alphabetically and geographically, current and past officers, division members, by-laws, affiliated organizations, and diplomates of the American Board of Examiners in Professional Psychology.

2330. Menninger Foundation. **Report of progress for the year from July 1, 1956 to June 30, 1957.** Topeka: Author, 1957. 116 p.—The report lists the board of governors, the staff members, and fellows and students of the Foundation. Publications of the staff, their offices and committee memberships and addresses delivered, are cited. Special sections describe Foundation activities in the areas of professional education, research, social applications, and clinical statistics.—*W. A. Varvel.*

HISTORY & BIOGRAPHY

2331. Braceland, Francis J. **Kraepelin, his system and his influence.** *Amer. J. Psychiat.*, 1957, 113, 871-876.—The monumental contributions and influence of Kraepelin to the past and present status of psychiatry are discussed.—*N. H. Pronko.*

2332. Carlson, Eric T. **Amariah Brigham. II. Psychiatric thought and practice.** *Amer. J. Psychiat.*, 1957, 113, 911-916.—The psychiatric thought and practice of Amariah Brigham, one of the early leading psychiatrists in the United States in the last century, is presented as an illumination of the picture it gives of the medical practice of the time. 47 references.—*N. H. Pronko.*

2333. ———. **Chestvovanie Akademika L. A. Orbeli.** (Honoring Academician L. A. Orbeli.) *Vestn. Akad. Nauk. SSSR*, 1957, 24, 105-107.—Appreciation.

2334. Dallenbach, Karl M. **Chauncey McKinley Louttit: 1901-1956.** *Amer. J. Psychol.*, 1956, 69, 682-685.—Obituary.

2335. Guilford, J. P. **Louis Leon Thurstone, 1887-1955.** *Nat. Acad. Sci. Biogr. Mem.*, 1957, 30, 348-382.—Obituary, portrait, and bibliography.

2336. Irwin, Francis W. **Samuel Willis Fernberger: 1887-1956.** *Amer. J. Psychol.*, 1956, 69, 676-680.—Obituary.

2337. Kasatkin, N. I. **Vladimir Mikhailovich Bekhterev (k 100-letiu so dnia rozhdeniia).** (Vladimir Mikhailovich Bekhterev (centenary of his birth).) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 148-156.—An evaluation and account of Bekhterev's work on the occasion of the centenary of his birth are provided. Because he was so glorious and many-sided a contributor to Russian physiology, psychiatry, etc., his failures are as many as his successes.—*I. D. London.*

2338. Kurtsin, I. T. **K 70-letiu so dnia rozhdeniia i 45-letiu nauchnoi, pedagogicheskoi i**

obshchestvennoi deiatel'nosti Akademika K. M. Bykova. (On the occasion of the 70th birthday and 45th anniversary of the scientific, pedagogical, and social activity of Academician K. M. Bykhov.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 346-351.—Appreciation.

2339. Lehman, Harvey C. James Pertice Porter: 1873-1956. *Amer. J. Psychol.*, 1956, 69, 686-687.—Obituary.

2340. Rayner, Doris. Adler and his psychology. *Ment. Hlth, Lond.*, 1957, 16, 58-62.—Adler has emphasized the diagnostic importance of early recollections because they reveal "the style of life in its origins and in its simplest expressions." 3 of Adler's early recollections are examined in the light of this concept: (1) his early immobilization because of rickets; (2) his misunderstanding of his mother's attention to a younger brother; and (3) his memory of a popular song. The author uses these recollections to trace the connections between Adler's personality and his Individual Psychology.—*R. A. Hagin.*

2341. Tatarenko, N. P., & Anter, I. M. Tvorcheskii put' Viktora Pavlovicha Protopopova. (Creative path of Viktor Pavlovich Protopopov.) *Zh. vyssh. nervn. Deiatel'*, 1955, 5, 916-920.—The authors provide an appreciation and review of Protopopov's work in the application of Pavlovian theory to psychiatry in the Soviet Union on the occasion of his 75th birthday. An account is given of his "scientific, pedagogical, and social" contributions of the last 50 years.—*I. D. London.*

2342. von Witzleben, Henry, et al. Symposium on Freud. *Behav. Sci.*, 1957, 2, 56-79.—Contains papers by H. von Witzleben "History, psychiatry and the behavioral sciences," H. W. Brosin "The primary processes and psychoses," Ilza Veith "Freud's place in the history of medicine," and E. R. Hilgard "Freud and experimental psychology" presented in commemoration of the one hundredth anniversary of the birth of Sigmund Freud.—*J. Arbit.*

2343. Watson, Robert I. Lightner Witmer: 1867-1956. *Amer. J. Psychol.*, 1956, 69, 680-682.—Obituary.

(See also Abstract 2396)

PROFESSIONAL PROBLEMS OF PSYCHOLOGY

2344. Litwinski, L. L'esprit professionnel en psychologie. (The professional spirit in psychology.) *Bull. Orient. scol. profess.*, 1956, 5, 64-67.—The diploma cult in psychology has gone too far and is killing the spirit of emulation. The author supports the opinion of Carl Rogers, which criticizes American psychology for discouraging original and creative thought. Psychology is no better than psychologists.—*R. Piret.*

2345. Schwartz, Emanuel K. Some trends in the development of psychology as a profession in the United States of America. *Int. J. soc. Psychiat.*, 1956, 2, 51-58.—Organized medicine and psychiatry represent the most serious obstacle to legalization of the status of the psychology profession. Psychology in moving from a theoretical to an applied science of human behavior will gain, it is suggested, greater acceptance by the public and the medical profession. It is in that direction that development is most urgent.—*R. M. Frumkin.*

2346. Soloyanis, George, & Zuidema, John. Improving psychologist and educator understanding. *Amer. J. ment. Defic.*, 1957, 61, 773-781.—The problem of improving the relationships between psychologists and educators is discussed. Attempts at solution of this problem by the South Carolina Mental Health Commission, the South Carolina Psychological Association, and the South Carolina Department of Education are described.—*V. M. Standt.*

(See also Abstracts 3048, 3453)

PHYSIOLOGICAL PSYCHOLOGY

2347. Akhmerov, U. SH. Korkovaia regulatsiia myshechnoi khronaksii. (Cortical regulation of muscular chronaxie.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 226-233.—The process of inhibition in the motor analyzer is responsible for lengthened muscular chronaxie, while the excitatory process in the motor analyzer conditions a shorter muscular chronaxie. When the exteroceptors are acted upon by a stimulus of medium intensity, an inhibitory process is induced in the motor analyzer from the corresponding analyzer with the result that chronaxie is lengthened. When the exteroceptors are influenced by a comparatively strong stimulus, the excitation irradiates onto the motor analyzer, bringing on shortening of muscular chronaxie.—*I. D. London.*

2348. Aksent'ev, S. B., Ermulovich, IA. V., Zhmudskaya, L. F., & Reznichenko, L. G. Izuchenie sosudistykh uslovykh i bezuslovykh refleksov kak metod analiza kortiko-vistseral'nykh vzaimootnoshenii pri razlichnykh zabolevaniakh. (Study of conditioned and unconditioned vascular reflexes as a method of analyzing corticovisceral interrelations in different diseases.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 49-57.—There are several basic groups of diseases with similar dynamics of change in the conditioned and unconditioned vascular reflexes. Disturbance of the course of conditioned and unconditioned vascular reflexes does not in itself determine the development of a concrete form of vascular pathology. This is closely linked with the fact that vascular reactions to the stimuli applied in this study (pain, thermal, acoustic, and photic) are but one of the components of complex conditioned or unconditioned reactions of the organism, and the changes in vascular reflexes frequently point not to an isolated disturbance of vascular regulation, but to a disturbance of these complex reactions as a whole.—*I. D. London.*

2349. Barsukova, Z. A. Razvitie zapredel'nogo tormozheniia u sobak, ne trenirovannykh k deistviu sil'nykh razdrashitelei. (Development of translimital [transmarginal] inhibition in dogs not trained for the effect of strong stimuli.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 297-303.—In a study devoted to the problem of the development of transmarginal inhibition under the action of intense conditioned stimuli, it was shown that in dogs with conditioned alimentary reflexes intensification of the condition stimulus (tone of 400 cycles/sec.) from 44 to 62 decibels results in a sharp decrease of the conditioned reflex to this tone, a successive lowering of magnitude of conditioned reflexes to other stimuli (bell, gurgling, light), retardation of the motor-alimentary reaction, and distortion of the course of unconditioned salivation, that

is, a considerable decrease during the first 30 sec. of eating and an abrupt increase in the next 30 sec. The decrease in conditioned reflexes points to the "irradiation of transmarginal inhibition to the auditory and visual analyzers and to the motor region of the cerebral cortex." The change in the course of unconditioned salivation also points to the spread of transmarginal inhibition to the "cortical representation of the unconditioned alimentary reflex."—*I. D. London.*

2350. Carpenter, John A. Effects of alcoholic beverages on skin conductance: An exploratory study. *Quart. J. Stud. Alcohol*, 1957, 18, 1-18.—Conductance level, assumed to represent sympathetic nervous system activity, and galvanic skin response, representing reactivity, were measured—the larger amount of beverage reduced the galvanic skin response the more. It is inferred that the small but measurable changes in autonomic nervous system activity resulting from ingestion of moderate amounts of alcoholic beverages may be related to the persistence of social drinking.—*W. L. Wilkins.*

2351. Ganitkevich, I. A. V., & Skarov, I. A. P. Vliianie zaderzhki i poter' zhelchi na protsessy korkovogo vovbuzhdeniia i tormozheniia. (Influence of retention of loss of bile on the processes of cortical excitation and inhibition.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 855-862.—Changes in conditioned activity were correlated with bilirubin concentration in the blood. Cortical excitation was "characterized by magnitude of positive conditioned reflexes"; cortical inhibition by "differentiation, conditioned inhibition, extinction, and retardation." A temporary increase in bilirubin concentration in the blood leads to rapid weakening of conditioned activity. Prolonged retention of bile in the organism, following the development of jaundice, accounts for a decrease of cortical excitation and the disturbance of internal inhibition with the cerebral cortex gradually passing into an inhibitory state. A decrease in bilirubin concentration results in abatement of cortical excitation down to complete inhibition of conditioned activity. In this case "transitory hypnotic phases" are observable in animals "with weak inhibitory processes." Bile, regardless of the role it plays in digestion, is an internal environmental factor, exerting a special influence on the functional state of the cerebral cortex.—*I. D. London.*

2352. Golubykh, L. I. Materialy k metodike issledovaniia dykhatel'nykh uslovnykh i bezuslovnykh refleksov u cheloveka. (Data on methods for studying respiratory conditioned and unconditioned reflexes in man.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 919-925.—The method described permits estimation of the "high [degree of] corticalization of the . . . unconditioned reaction of arrest of breathing, caused by action of a air-jet of determined strength." Data submitted show that the method is useful in establishing properties of higher nervous activity in both normal and pathological man in a "comparatively short time."—*I. D. London.*

2353. Kol'tsova, M. M. O fiziologicheskikh mekhanizmach razvitiia protsessa obobshcheniia u rebenka. (On the physiological mechanisms of development of the process of generalization in the child.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 201-211.—Data are presented which lead to the conclusion that

abstraction and generalization are not separate "mental operations," but that their physiological characteristics make both processes quite similar. The latter operation is not merely one of synthesis, but contains within it a considerable measure of analysis. The process of generalization, as revealed in language, is one that is, therefore, analytico-synthetic.—*I. D. London.*

2354. Laird, Robert D., & Fonner, Robert L. The protective effect of sodium diphenylhydantoin in the hyperacute radiation syndrome. *USA med. Res. Lab. Rep.*, 1957, No. 262, ii, 14 p.—Sodium diphenylhydantoin (Dilantin®) was administered to CF₁ mice prior to exposure to 250 KVP x-rays controlled convulsive activity and increased median survival time several-fold between 55,000 and 150,000 r. Control by Dilantin® was measured by (1) decrease in the incidence and severity of convulsions and (2) delay in onset of the convulsive phase. The results obtained with Dilantin® suggest that convulsive activity which arises in experiment animals after exposure to massive doses of radiation either originates in or is mediated through the motor cortex of the cerebrum.—*R. V. Hamilton.*

2355. Mechelke, K. Die Labilität der Blutdruckregulation bei nervösen Kreislaufregulationsstörungen als Ausdruck der vegetativen Gesamtverfassung. (The lability of blood pressure regulation in nervous circulatory disturbances as expression of autonomic makeup.) *Z. Psychother. med. Psychol.*, 1957, 7, 79-83.—There are 2 forms of labile blood pressure regulation: dynamic-labile and static-labile. These 2 conditions stem from different bodily conditions and can combine in various ways. Since the various kinds of bodily regulation are interlocking, disturbance of circulatory regulation usually involves widespread disturbances of regulation. Such disturbance must be understood as a faulty development of the person, involving both constitution and experience. 29 references.—*E. W. Eng.*

2356. Shishlovskaya, K. I. A. Vliianie vysshego otdela tsentral'noi nervnoi sistemy na uroven' sakhara v krovi. (Influence of the higher division of the central nervous system on the level of sugar in the blood.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 304-311.—In a study, utilizing conditioned salivation reflexes, it is shown that: (a) the application of conditioned stimuli is attended by a change in the "dynamics of the sugar-content curve" in the blood; (b) the "reversal of the signal meaning of conditioned stimuli, the collision of the nervous processes, and the change of the stereotype of the experiment" (all of which lead to considerable alterations in the conditioned-reflex activity) are attended by a lasting modification of the blood-sugar curve; (c) the greater the change of the functional condition of the cortex, the greater the modification of the "dynamics of sugar-content" in the blood; (d) the return of the sugar-content curve to its initial level occurs simultaneously with restoration of conditioned-reflex activity.—*I. D. London.*

2357. Struchkov, M. I. O kharaktere vzaimootnoshenii perekliuchennykh uslovnorefleksnykh svyazef. (On the nature of the interrelations between switched over conditioned-reflex connections.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 830-836.—If 2 heterogeneous conditioned reflexes (alimentary and defen-

sive reflexes) are established in response to one and the same stimulus under different conditions of the experiment, then this stimulus will always produce the conditioned response appropriate for the given conditions of the experiment. The other response will be inhibited at the time. However, if under the given conditions of the experiment, the appropriate conditioned response should be inhibited in some way or other, for instance, by means of an "extra stimulus or by extinction," the other conditioned response appears which had been elaborated to the stimulus under other experimental conditions. This leads to the conclusion that "switched over heterogeneous conditioned connections are in reciprocal and mutually inductive relationship."—*I. D. London.*

2358. Tsobkhallo, G. I. **K voprosu o premenenii v farmakologicheskikh issledovaniyakh metodiki pishchevykh dvigatel'nykh uslovyynykh refleksov na krol'kakh.** (On the application in pharmacological studies of the method of alimentary motor conditioned reflexes in rabbits.) *Zh. vyssh. nervn. Deiatel'.*, 1956, 6, 926-932.—Modifications of certain standard procedures are presented, along with experimental data, aimed at eliminating difficulties in usual studies of the conditioned reflex in various pharmacological states.—*I. D. London.*

2359. Vinogradova, O. S., & Sokolov, E. N. **Sootnoshenie reaktsii sosudov ruki i golovy v nekotorykh bezuslovyynykh refleksakh u cheloveka.** (The relationship between reactions of blood vessels of hand and head in some unconditioned responses in man.) *Fiziol. Zh. SSSR*, 1957, 43, 54-59.—Simultaneous records were obtained from a finger plethysmograph and a membrane plethysmograph applied to different points on the surface of the head. Unconditioned vascular reactions to auditory, visual, thermal, and pain stimuli were thus observed. As a rule, the first presentation of a new stimulus gives rise to an orienting reflex in which opposite reactions are displayed by vessels of the head (dilation) and hand (constriction). Thermoregulatory reactions became uniform—vasoconstriction on cold application, vasodilation in response to heat. Painful stimuli produced vasoconstriction.—*I. D. London.*

2360. Vitenzon, A. S. **K voprosu o fiziologicheskikh mekhanizmaxh techeniya sledovykh reaktsii v zritel'nom analizatore.** (On the physiological mechanisms of the course of trace reactions in the visual analyzer.) *Zh. vyssh. nervn. Deiatel'.*, 1956, 6, 218-225.—In a study aimed at demonstrating the close connection between the course of visual trace reactions (afterimages) and the functional state of the cerebral cortex, it was shown that, as the intensity of the inhibitory process in the cortex progressively increases, an increasingly pronounced and longer depression of the visual trace reaction sets in with progressive increase in the latent period and shortening of the trace reaction until it disappears. The cortical inhibitory process in this study was induced by a variety of means: pharmacological agents, insufficient sleep, hypoxia, and intermittent auditory stimulation. It is thought that successive induction in the cortex is the mean physiological mechanism involved in the course of visual trace reaction.—*I. D. London.*

(See also Abstracts 2535, 2949, 2960, 3222)

NERVOUS SYSTEM

2361. Adams, C. L., Gibbs, E. L., & Gibbs, F. A. **Asynchronism of electrical activity of frontal lobes during sleep: A late sequel of frontal lobectomy.** *A.M.A. Arch. Neurol. Psychiat.*, 1957, 77, 237-242.—Electroencephalographic study of 202 Ss with frontal lobectomy has shown only 1 consistent, although permanent and irreversible, finding, namely, the delayed appearance (after the 18th postoperative month) of an asynchronism of slow activity in the frontal lobes during deep sleep. It is believed this may be due to delayed degeneration of commissural fibers.—*L. A. Pennington.*

2362. Adey, W. Ross. **Somatic aspects of the nervous system.** *Annu. Rev. Physiol.*, 1957, 19, 489-512.—The literature reviewed is discussed in terms of: Peripheral receptors and conductors, Input to spinal cord, Ascending pathway in cord and brain stem, Thalamus and diencephalon, Cortical input, Efferent pathways, Final common path, Cerebral associative mechanisms, Cerebral blood supply and cerebrospinal fluid circulation, Cerebral metabolism, and Innovations in physiological techniques. 317 references.—*M. J. Wayner, Jr.*

2363. Akhmerov, U. SH. **Opyt khronaksimetricheskogo analiza dinamiki korkovykh protsessov u liudei.** (An attempt at chronaximetric analysis of the dynamics of the cortical processes in people.) *Zh. vyssh. nervn. Deiatel'.*, 1956, 6, 365-369.—A "dynamic chronaximetric method," which has much to recommend it both for physiological and clinical investigations, is described for estimating the functional properties of the cortex.—*I. D. London.*

2364. Altukhov, G. V. **Vlianie ul'trafiol'etovogo i krasnogo sveta na vysshuiu nervnuiu deiatel'nost' cheloveka.** (Effect of ultraviolet and red light on higher nervous activity in man.) *Zh. vyssh. nervn. Deiatel'.*, 1956, 6, 353-359.—Motor conditioned reflexes and bioelectrical activity of the brain were studied at normal barometric pressure and in a barochamber at reduced pressure. It was found that red light with screen brightness of 1 apostilb and ultraviolet light with a screen fluorescence brightness of 0.8 apostilb, acting up to two hours, do not bring on changes in higher nervous activity leading to reduced work-capacity. Under conditions of normal oxygen supply red light appears to have a more favorable effect than ultraviolet light. With moderate oxygen deficiency at reduced pressure (462 Hg), ultraviolet and red light of the above intensity have an equal effect on conditioned reflex activity.—*I. D. London.*

2365. Anokhin, P. K. **O fiziologicheskome substrat signal'nykh reaktsii.** (On the physiological substratum of signal reactions.) *Zh. vyssh. nervn. Deiatel'.*, 1957, 7, 39-48.—Data and argument are provided to show that there is no doubt that the formation of preparatory afferential excitation accompanying the action of the conditioned stimulus is a consequence of the formation of cumulative modifications of excitability in definite cortical zones and systems. Evidently, this physiological substratum lies at the basis of the formation of that controlling afferential apparatus which has been called the "acceptor of influence."—*I. D. London.*

2366. Aprison, M. H., Nathan, P., & Himwich, H. E. **Cholinergic mechanism of brain involvement in compulsive circling.** *Amer. J. Physiol.*, 1956,

184, 244-252.—Compulsive circling behavior directed either to the left or right, was produced in rabbits by the injection of an anticholinesterase drug (DFP) into the right common carotid artery. A study was then made of the cholinesterase activity of various cortical and subcortical structures. An asymmetric cholinesterase pattern in the cortex and caudate nucleus was always associated with the involuntary circling behavior. However, no asymmetry in cholinesterase activity was noted between corresponding posterior right and left brain areas (medulla, pons, cerebellum). The evidence suggests a cholinergic mechanism in the cerebral cortex and caudate nucleus for the production of forced circling in rabbits.—J. P. Zubeck.

2367. Arlashchenko, N. I., & Erdman, G. M. O parabioticheskikh izmeneniiakh v dvigatel'noi zone kory golovnogo mozga krolika pod deistviem vzhivlenykh elektrodov. (On the parabolic alterations in the motor zone of the cortex of the brain in the rabbit under the action of implanted electrodes.) *Fiziol. Zh. SSSR*, 1957, 43, 22-25.—An electrode, implanted in the cortical motor zone, "exercises a steady excitatory action" and "produces a parabolic center" there.—J. D. London.

2368. Baryshnikov, I. I., Vinogradov, V. M., Nikiforov, M. I., & Shanin, I. N. Vlianie aminazina na nekotorye funktsii tsentral'noi nervnoi sistemy. (Influence of aminasin on some functions of the central nervous system.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 881-890.—If one considers the distinctions between the "easily disturbed artificial conditioned reflex" and the "unconditioned reaction to a destructive stimulus," where "suppression of both reactions parallel each other," it follows that the main effect of aminasin tells not so much on the function of the cerebral cortex as on the activity of the underlying parts of the central nervous system. Findings on rabbits allow the localization of the main effect of aminasin on the spinal cord in the region of internuncial neurons.—J. D. London.

2369. Bentelev, A. M. Vlianie asfiksii i obeskovlivanii na refleksy spinnoego mozga. (Influence of anoxia and blood letting upon spinal reflexes.) *Fiziol. Zh. SSSR*, 1956, 42, 849-853.—Anoxia and anemia are "strong stimulators of the central nervous system." In both parts of the sectioned spinal cord a threephased change of excitability appears: heightening of excitability, its subsequent lowering, followed by "reflex paralysis."—J. D. London.

2370. Charles, Margaret S., & Fuller, John L. Developmental study of the electroencephalogram of the dog. *EEG clin. Neurophysiol.*, 1956, 8, 645-652.—EEGs were recorded from puppies 2 days to 8 weeks of age. Sudden visual or auditory stimulation was followed by classic blocking responses. EEGs showed difference between sleep and wakefulness at 18-20 days. The most marked developmental changes in the EEG occurred at the period of most marked change in physical and social development and at the time that relatively stable CRs can be established.—R. J. Ellingson.

2371. Decourt, Philippe. Introduction à l'étude du psychisme chez les animaux supérieurs. (Introduction to the study of psychic mechanisms in higher animals.) *Ann.-médec. psychol.*, 1956, 1(5), 737-769.—The increasing use of animal experiments

in the empirical study of psychoneuroses points to the need of a better understanding of psychic mechanism in higher animals. Following, and adapting the evolutionist concept of Lamarck, the author describes three levels of nervous activity (simple reflex response, instinctive reaction and higher mental processes) corresponding to stages of phylogenetic evolution.—M. D. Stein.

2372. Derbyshire, A. J., Fraser, A. A., McDermott, M., & Bridge, A. Audiometric measurements by electroencephalography. *EEG clin. Neurophysiol.*, 1956, 8, 467-478.—The EEG in children in secobarbital sleep shows Rs to the presentation of tones by an audiometer, consisting of an on effect (usually K-complex), an off effect, and a delayed reaction (arousal). Any intensity of tone was considered to be above threshold when it evoked a positive EEG R 50% or more of the time. Thresholds so observed in 22 Ss agreed with those obtained by standard audiometry within ± 18 db. They extend the measurement of auditory profiles into those infants and handicapped children who do not communicate.—R. J. Ellingson.

2373. Ellingson, Robert J. Comments on Schmidt's "The reticular formation and behavioral wakefulness." *Psychol. Bull.*, 1957, 54, 76-78.—This paper presents an analysis of two issues raised by Schmidt (see 32: 2402) on the relationship of the reticular system to behavioral wakefulness and behavioral sleep.—W. J. Meyer.

2374. Fedorov, V. K. Uchenie I. P. Pavlova o tipakh vysshel' nervnoi deiatel'nosti. (I. P. Pavlov's theory on types of higher nervous activity.) *Vop. Filos.*, 1956, No. 5, 95-99.—It is necessary to study the intermediate types which do not fit into the four types distinguished by Pavlov. Pavlov himself has insisted on this. By considering subjective material and the life history of a person, one can determine his original "type of nervous system" and estimate which of its properties were later modified by life experiences and the environment. Continued like modifications over the generations will result in alteration of the genotype of the nervous system itself in accordance with Lysenko's theory. Illustrations are given and discussed in Pavlovian terms. Thus, it is said of a person with a "weak type of nervous system" that his "awakened sex instinct, presenting new life demands . . . , exceeded the low level of the top-limit of the work-capacity of his cortical cells."—J. D. London.

2375. Fessard, A. L'EEG est-il une fidèle image de l'activité cérébrale. (Does EEG correctly reflect cerebral activity.) *Psychol. franç.*, 1957, 1(2), 12-14.—Following a discussion of the multiplicity of factors which combine to produce the EEG trace, the writer concludes that it is, in general, a misleading index of cerebral activity. It is suggested that progress in interpretation of traces will rest upon further knowledge of the electro-neurophysiological events which produce the wave forms commonly observed.—B. A. Maher.

2376. Gakkel', L. B. K voprosu o roli iavlenii induktsii vo vzaimodeistvii signal'nykh sistem. (On the role of inductive phenomena in the interaction of the signal systems.) *Zh. vyssh. nervn. Deiatel'*, 1955, 5, 801-806.—In pathological states of higher nervous activity intensification of the process

of induction furthers the development of confusion in thought and speech as well as other forms of "incorrect reflection of reality in the second signal system."—*I. D. London.*

2377. Gangloff, H., & Monnier, Marcel. **Electro-raphic aspects of an "arousal" or attention reaction induced in the unanesthetized rabbit by the presence of a human being.** *EEG clin. Neurophysiol.*, 1956, 8, 623-629.—An "arousal" R in the brain of the rabbit, involving at least 3 brain mechanisms, a reticulo-cortical desynchronizing mechanism, a thalamo-cortical synchronizing, and a rhinencephalic mechanism, is described. The visual perception of a human, especially when moving, proved to be a more effective arousal stimulus to the unanesthetized rabbit than did light flashes or hand claps, suggesting that the arousal mechanisms may be activated by higher brain systems concerned with the control of attention and emotional behavior.—*R. J. Ellingson.*

2378. Gardner, Ernest. **Fundamentals of neurology.** (3rd ed.) Philadelphia: W. B. Saunders, 1958. xi, 383 p.—This third revision (see 27: 1652) discusses the nervous system in terms of its: anatomy, chemistry, formation and development, modes of excitation and conduction, reflex arc, mediating structures, visceral and muscular activity. Emphasis is placed on the general (exteroceptive cutaneous and subcutaneous, proprioceptive, and interoceptive sensations) and special (vision, hearing, taste, smell, and equilibrium) senses, and their afferent pathways, spinal cord, brain stem, cerebellum, forebrain and cerebral cortex. The clinical importance of these topics is discussed where appropriate. Short biographical sketches of famous names in neurology are included along with a glossary of new terms.—*R. Holroyd.*

2379. Gei er, A., Yamasaki, S., & Lyons, R. **Changes in nitrogenous components of brain produced by stimulation of short duration.** *Amer. J. Physiol.*, 1956, 184, 239-243.—Evidence is presented which indicates that when the cerebral cortex is stimulated for a few seconds through nerves or by directly applied electrodes, significant amounts of nitrogen—containing lipids and nucleic acids are lost from the stimulated area. At the same time, the non-protein nitrogen content in the stimulated cortex is increased. These chemical changes are proportional to the number of stimulations and are reversible at rest. It is concluded that nuclei acids and lipids are metabolized in the cerebral cortex during activity.—*J. P. Zubek.*

2380. Gloor, P. **The pattern of conduction of amygdaloid seizure discharge: An experimental study in the cat.** *A.M.A. Arch. Neurol. Psychiat.*, 1957, 77, 247-258.—"The conduction of electrical after-discharge induced by electrical stimulation of the amygdaloid nucleus was studied in 19 cats in order to understand the functional anatomy of seizure mechanisms in ictal temporal lobe automatism in man known to be dependent upon epileptic discharge originating in the amygdaloid region." Results, presented in neurological terms, are discussed in relation to Penfield's studies and to the field of clinical medicine. 25 references.—*L. A. Pennington.*

2381. Gunin, V. I. **Ob izmeneniiakh vyssheĭ nervnoi deiatel'nosti ėkstirpatsii korkovogo kontsa zritel'nogo analizatora.** (On changes in higher

nervous activity after extirpation of the cortical terminus of the optic analyzer.) *Zh. vyssh. nervn. Deiatel'.*, 1956, 6, 872-880.—Higher nervous activity was studied in rabbits, white rats, and dogs following unilateral and bilateral extirpation of the cortical terminus of the optic analyzer. Changes in higher nervous activity and their nature and depth depend on "type of nervous system" possessed by the animal as well as on the species. In both unilateral and bilateral extirpations, the most pronounced changes of cortical dynamics occurred in rabbits, then in white rats, and to a lesser degree in dogs. "Restoration of positive and inhibitory conditioned reflexes begin with the dermal and auditory analyzers." Simple photic conditioned reflexes are restored after unilateral extirpation first in dogs, then in rats, and lastly in rabbits. Complex photic reflexes are restored after unilateral extirpation only in dogs. In cases of bilateral extirpation simple photic conditioned reflexes (positive and inhibitory) are fully restored only in dogs. After this operation "object conditioned reflexes completely disappear in dogs and rabbits."—*I. D. London.*

2382. Gurevich, B. KH. **Kibernetika i nekotorye voprosy sovremennoi sistemy.** (Cybernetics and certain problems of contemporary physiology of the nervous system.) *Vestn. Akad. Nauk SSSR*, 1957, 24, 31-40.—A short treatment of several problems in neurophysiology is provided from the cybernetic point of view, and several analogies are discussed. Pavlovian physiology will advance as a result of the congenial application of cybernetic concepts to it.—*I. D. London.*

2383. Juvet, M. **Données neuro-physiologiques récentes concernant l'attention et le conditionnement.** (Recent neurophysiological data on attention and conditioning.) *Psychol. franç.*, 1957, 1(2), 15-17.—An attempt is made to relate certain concepts from classical conditioning with data taken from EEG and other electrical recordings of cortical activity. The concepts of attention, external inhibition and extinction are discussed.—*B. A. Maher.*

2384. Karamian, A. I. **Ėvoliutsiia funktsii mozg-zhechka i bol'shikh polusharii golovnogo mozga.** (Evolution of the functions of the cerebellum and the large hemispheres of the brain.) Moscow: Medgiz, 1956. 187 p.—The author's monograph is a generalization of his investigations on the evolution of cerebellar and cerebral hemispheric functions as well as on the evolution of their interrelations. Problems associated with comparative physiology of higher nervous activity are also discussed.—*I. D. London.*

2385. Karimova, M. M. **Izmenenie vyssheĭ nervnoi deiatel'nosti pri udalenii mozgovogo sloia nad-pocheknykh zhelez u sobak razlichnykh tipov nervnoi sistemy.** (Changes in higher nervous activity following ablation of the medullar layer of suprarenal glands in dogs with different types of nervous system.) *Zh. vyssh. nervn. Deiatel'.*, 1956, 6, 415-425.—A study was made of conditioned-reflex disturbances in dogs following extirpation of the medullar layer of the suprarenal glands in dogs. The nature of the disturbances, brought on by the operation, is closely related to the typological properties of the dog's nervous system. A sharp drop in adrenalin content in the blood leads to weakening of the internal inhibitory processes, especially in dogs with extreme types of nervous system. The excitatory

process in dogs of the weak type diminishes simultaneously with the inhibitory process for a prolonged period immediately following the operation. In dogs of the strong type the tone of the excitatory process markedly exceeds the preoperative norm within four to six days after the operation and remains for a considerable time at this level in dogs of the strong balanced type, while in dogs of a strong unbalanced type it is reduced in a month's time. The degree of deviation of unconditioned salivation from the preoperative norm is much greater and longer than for conditioned salivation.—*I. D. London.*

2386. **Klosovskii, B. N., & Kosmarskaia, E. N.** *Izmenenie golovnogo mozga posle polnogo vykliucheniia zritel'nogo, slukhovogo, vestibuliarnogo i oboniatel'nogo retseptorov v rannem vozraste.* (Changes in the brain following the complete ablation of the visual, auditory, vestibular, and olfactory receptors at an early age.) *Zh. vyssh. nervn. Deiatel'.*, 1956, 6, 443-450.—This study was undertaken on puppies to determine the effect of peripheral stimulation from the receptors on the development of the termini of the corresponding analyzers in the brain. A one-stage complete ablation outside the cranium was carried out involving the visual, auditory, vestibular, and olfactory receptors. It was found that after exclusion of the above receptors the weight and size of the brain of the experimental puppies increased with age, but were inferior as compared with that of the controls. Cessation of peripheral impulses was attended by reduction in size of the termini of the auditory and olfactory analyzers, with particular underdevelopment of the olfactory bulb. The terminus of the cutaneous-motor analyzer did not diminish, but grew somewhat in size.—*I. D. London.*

2387. **Kosmarskaia, E. N., & Purin, V. R.** *Izmeneniia temperaturny mozga i tela pri medikamentoznom sne.* (Changes of temperature of the brain and body during medically induced sleep.) *Fiziol. Zh. SSSR*, 1957, 43, 40-45.—Temperature of the brain, cerebrospinal fluid, and body was recorded in cats by means of thermocouples during sleep induced by barbamil (60 mg per kg of body weight). With the dosage used, alternating periods of various depth of sleep were obtained. Variations of intracerebral temperature are correlated to these periods. Two types of temperature fluctuations reflect the pattern of sleep. During induction of sleep cerebral temperature is lowered. It rises with increasing depth of sleep. A further rise of temperature is noted when depth of sleep is decreased. No periodic temperature fluctuations are observed when sleep reaches narcotic level.—*I. D. London.*

2388. **Kriuchkova, A. P., & Ostrovskaya, I. M.** *O vozrastnykh i individual'nykh osobennostiakh vyssheinnervnoi deiatel'nosti detei pervogo goda zhizni.* (On age and individual features of higher nervous activity in children one year old or less.) *Zh. vyssh. nervn. Deiatel'.*, 1957, 7, 63-74.—Observations of babies, one-year-old or less, and study of their conditioned reflexes to sound (eye-lid and "motor-alimentary" reflexes) show the following: (1) Weakness of the excitatory and inhibitory processes in the 3rd and 4th month old child is characteristic. (2) In the latter half and by the end of the first year, the "strength of nervous processes" increases; conditioned reflexes are elaborated more rapidly and become stable

sooner; individual differences in responses are discernible. The nature of conditioning and its comparison with the clinical characteristics of the child's development and behavior make it thus possible to determine the typological features of higher nervous activity in children during the first year of their life.—*I. D. London.*

2389. **Liberson, W. T.** *Recent advances in Russian neurophysiology.* *Annu. Rev. Physiol.*, 1957, 19, 557-588.—A review of the Russian literature from January 1950 to July 1956 on the following topics: Excitability: Nerves and muscles, Receptors, Spinal cord, Cerebral potentials and Conditioning. 140 references.—*M. J. Wayner, Jr.*

2390. **Lurii, A. R. (Ed.)** *Problemy vyssheinnervnoi deiatel'nosti normal'nogo i anomal'nogo rebënka.* (Problems of higher nervous activity in the normal and nonnormal child.) Moscow: Akad. Pedag. Nauk RSFSR 1956.—The contributions of the authors cover a range of topics from studies of the pathophysiological mechanisms of oligophrenia in children to those investigating the role of the second signal system in the development of conditioned motor reflexes in children and the relationship of that system to the first signal system.—*I. D. London.*

2391. **MacLean, Paul D.** *Visceral functions of the nervous system.* *Annu. Rev. Physiol.*, 1957, 19, 397-416.—Literature pertinent to the following systems was reviewed: Limbic system, Hypothalamus, Neocortex, Reticular system, midbrain, pons, medulla, Peripheral autonomies: neural mechanisms, and Peripheral autonomies: visceral functions. 229 references.—*M. J. Wayner, Jr.*

2392. **Meyer, Victor.** *Critique of psychological approaches to brain damage.* *J. ment. Sci.*, 1957, 103, 80-109.—Psychological and neurophysiological evidence indicate that anatomistic theories of brain organization are untenable, but the psychological evidence is also against field theories; theories of regional equipotentiality or of functional equivalence seem most promising. What mental abilities are selectively impaired by what circumscribed lesions cannot absolutely be said, and the evidence on orectic factors is even scantier. 102 references.—*W. L. Wilkins.*

2393. **Naumova, T. S.** *Izmeneniia élektricheskoi aktivnosti khvostatogo iadra pri zamykanii vremennoi svyazi slukhovogo i dvigatel'nogo analizatorov.* (Changes in electrical activity of the caudate nucleus on establishment of a conditioned connection between the auditory and motor analyzers.) *Fiziol. Zh. SSSR*, 1957, 43, 14-21.—In the presence of a "dominant center," created by the action of direct current on the cortical motor zone, a motor response to an auditory stimulus appeared. Electrical changes in the cortex and the caudate nucleus were studied to illuminate the phenomenon.—*I. D. London.*

2394. **Netter, Frank H.** *The CIBA collection of medical illustrations. Vol. 1. A compilation of paintings on the normal and pathologic anatomy of the nervous system with a supplement on the hypothalamus.* Summit, N. J.: CIBA Pharmaceutical Products, 1957. 168 p. \$7.00.—122 full-color plates with descriptive text are arranged in 5 sections and a supplement: Anatomy of the spine; The central nervous system; Functional neuro-anatomy; The autonomic nervous system; Pathology of the brain and

spinal cord; and Anatomy and functional relations of the hypothalamus.—A. J. Sprow.

2395. Nikolaeva, N. I. Summirovaniye razdrzheniĭ v kore bol'shikh polusharii golovnogo mozga. (Summation of excitation in the cerebral cortex.) *Fiziol. Zh. SSSR*, 1957, 43, 32-39.—Data on the "interaction of subthreshold and threshold stimulation" are presented. In many respects the results of such interaction are reminiscent of what is observed "in summation of conditioned stimuli."—I. D. London.

2396. Orbeli, L. A. I. M. Sechenov i ego rol' v razvitiĭ fiziologii nervnoi sistemy. (I. M. Sechenov and his role in the development of the physiology of the nervous system.) *Zh. vyssh. nervn. Deiatel'*, 1955, 5, 765-772.—A discussion of Sechenov's contribution to and role in the development of neurophysiology.—I. D. London.

2397. Page, Irvine H. Chemistry of the brain: Past imperfect, present indicative, and—future perfect? *Science*, 1957, 125, 721-727.—The recent research with anticonvulsants, chemical transmitters of nerve impulses, tranquilizers, lysergic acid diethylamide, and serotonin has stimulated interest in the chemistry of the brain. "My purpose is to examine a field of endeavor that is not yet fully formed in the hope that adumbrating its lines of growth may facilitate and better its development." Secretory function of the brains of infrahuman animals, chemical events in the autonomic nervous system, psychotomimetic drugs, and piperazine derivatives are discussed. 34 references.—S. J. Lachman.

2398. Promtova, T. N. Vliianie nepreryvnogo elektricheskogo polia UVCH na vysshuii nervnui deitel'nost' sobak v norme i patologii. (Influence of a continuous electrical ultra-short wave field on higher nervous activity of dogs in normal and pathological states.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 846-854.—The method of conditioned reflexes was applied to a study of the action of single and repeated (5-10) ultra-short wave applications of 10 min. duration to a dog's head and to a study of their after effect on the "functional state of the cerebral cortex in dogs in normal and pathological inhibitory states." "The influence of ultra-short waves is manifested in 'stabilization' of conditioned activity at the upper limit of the average level. The inhibitory process concentrates. Unconditioned alimentary reactions become more stable at the lower limit of the average level." A single application influences cortical activity for 2 to 3 days. The after effect of 5 to 10 applications lasts 10 days in normal dogs; while in dogs in a state of pathological inhibition, the "favorable effect is traceable up to 3 months."—I. D. London.

2399. Ralston, B., & Ajmone-Marsan, C. Thalamic control of certain normal and abnormal cortical rhythms. *EEG clin. Neurophysiol.*, 1956, 8, 559-582.—The introduction of small amounts of penicillin into the thalamus of cats results in alteration of the 8-12 sec. barbiturate spindle to 3.5-5 sec., with or without spiking activity and with a tendency toward synchronization. The evidence suggests that these changes are mediated through the non-specific thalamic system. The thalamus is very likely the anatomo-physiological substrate for the 8-12 sec. barbiturate spindle and the cerebral cortex is only secondarily activated by impulses of subcortical origin. A comparison is made between the altered spindles

and some human pathological rhythms in the EEG in some cases of subcortical involvement, and centrencephalic seizures.—R. J. Ellingson.

2400. Rosenzweig, M. R. La chimie du cerveau et le comporte-individual. (Brain chemistry and individual behavior.) *Psychol. franç.*, 1957, 1(2), 10-11.—A brief report is presented of an investigation of the relationship between "visual" and "spatial" hypotheses in maze-learning by rats, and the rate of cholinesterase activity in the two groups so differentiated. The results are used to support the conclusion that the rate of activity of cholinesterase is higher in the spatial than visual animals, and that the decline in this level associated with age is relatively greater for the visualisers.—B. A. Maher.

2401. Sakhiulina, G. T. Izmeneniia elektricheskoi aktivnosti mozga pri uslovnoreflektornoi deiatel'nosti v rabotakh XX mezhdunarodnogo kongressa fiziologov. (Changes in the electric activity of the brain during conditioned activity in the papers at the 20th International Congress of Physiologists.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 164-167.—Abstracts are given of papers on modification of electrical activity of the brain during conditioned-reflex activity, read at the 20th International Congress of Physiologists. It is claimed that Pavlovian theory is confirmed concerning "dynamic localization of functions" and concerning the existence of "clustered and distributed elements in the brain."—I. D. London.

2402. Schmidt, H., Jr. The reticular formation and behavioral wakefulness. *Psychol. Bull.*, 1957, 54, 75.—There is evidence to support the notion that level of activity of the brain stem reticular formation (BSRF) is a necessary and sufficient condition for behavioral wakefulness. However the notion that reduction of activity of the BSRF must result in behavioral sleep is not supported by the empirical evidence.—W. J. Meyer.

2403. Selivanova, E. V., & Erdman, G. M. Deistvie postoiannogo magnitnogo polia na fenomen sechenovskogo tormozheniia. (Effect of a steady magnetic field on the phenomenon of Sechenov's inhibition.) *Biofizika*, 1956, 1, 412-415.—The effect of a steady magnetic field on the nervous system is very close to that of positive electric potential. The field reduces time of the spinal reflex when applied to the lumbar area of the spinal cord and to the medullar and mid-brain area of the thalamic frog in the presence of Sechenov's inhibition. The effect does not appear in its absence.—I. D. London.

2404. Shtikkel', E. I. Vliianie eksperimental'nogo sryva vysshei nervnoi deiatel'nosti na tekhenie infektsii, vyzvannoi gemoliticheskim streptokokkom u morskikh svinek. (Effect of experimental disruption of higher nervous activity on the course of infection caused by hemolytic streptococcus in guinea pigs.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 451-460.—Using guinea pigs with previously conditioned motor alimentary reflexes, it was shown that experimental disruption of higher nervous activity aggravates the course of streptococcal infection. The influence of optimal doses of streptococcus toxin is not diminished, however, by the disruption of higher nervous activity.—I. D. London.

2405. Smefantsov, B. D. Rol' kory bol'shikh polusharii golovnogo mozga v kompensatornykh

javleniakh posle odnostonnoy ekstirpatsii briushnoi simpaticheskoy tsepy. (Role of the cerebral cortex in compensatory phenomena following unilateral extirpation of the abdominal sympathetic chain.) *Fiziol. Zh. SSSR*, 1957, 43, 26-31.—It is shown that participation of the cerebral cortex seems to be important for the restitution of normal somatic and autonomic functions affected by unilateral desympathization.—I. D. London.

2406. Sokolova, A. A., & Bu, K. H. S. *Elektrofiziologicheskoe izucheniye dominantnogo ochaga v kore golovnogogo mozga krolika, sozdannogo delstviem postoiannogo toka.* (Electrophysiological study of the dominant area in the cerebral cortex of a rabbit produced by the action of a continuous current.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 135-145.—To study "dominant inertia" in rabbits with implanted electrodes, a dominant area was developed in the sensory-motor area of the cerebral cortex "with the help of continuous current." Then extinction of the dominant was studied. It was found that, after switching off the current, the motor reaction caused by summation in the dominant area persisted for a prolonged period (2 to 3 hours) after the current has been switched off. The more pronounced the reaction was manifest in the experiment, the longer it lasted. The extinction of the motor reaction as well as its development occurred in conformity with the strength of the stimuli applied.—I. D. London.

2407. Speranskiy, A. D. "Tormozheniye" v patologii. ("Inhibition" in pathology.) *Fiziol. Zh. SSSR*, 1956, 42, 831-837.—An examination of the concept of inhibition in physiology and pathology is made. It is concluded that it is wrong to view inhibition as merely the extinction of other processes, that it is more fruitful to regard it as excitation, but with reverse sign. Excitation and inhibition should be viewed monistically, and the stereotyped conception of protective inhibition, which is so much in vogue now, should not be looked upon as a philosopher's stone for the resolution of the many difficulties associated with the problem of inhibition. Inhibition is another form of excitation, and in the monism, made up of the two, the concept of lability of the nervous processes serves a real purpose.—I. D. London.

2408. Springarn, James A. Brain injury and morphine withdrawal. *Psychol. Bull.*, 1957, 54, 65-72.—"A review of the literature indicates lack of agreement as to the presence or absence of opiate withdrawal symptoms following surgically imposed brain damage. The controversy is resolved when recourse is made to the temporal factor, i.e., the time at which withdrawal is carried out relative to the time an operation is performed. It is suggested that the withdrawal phenomenon is as complex as addiction itself, and that both are related to many peculiar effects that accrue to cerebral tissue destruction." 26 references.—W. J. Meyer.

2409. Starkov, P. M., & Pokrovskiy, V. M. K voprosu o korkovoy regulatsii mocheotdeleniya u cheloveka. (On cortical regulation of urinary excretion in man.) *Fiziol. Zh. SSSR*, 1956, 42, 887-892.—Urinary excretion from each kidney was directly observed in a case of congenital bladder ectopia. The volume of urine, eliminated from the ureters by successive peristaltic waves, was recorded

by means of a special device. Intake of 500 ml of water, following the sound of a bell, on repetition resulted in conditioned diuresis. Both the sound of the bell and the experimental situation became conditioned stimuli for diuresis. The diuretic response to the situation proved to be a stable conditioned reflex which did not tend toward extinction, though it was readily inhibited by a number of extraneous factors.—I. D. London.

2410. Tokizane, Toshihiko, & Sawyer, Charles H. Sites of origin of hypoglycemic seizures in the rabbit. *A.M.A. Arch. Neurol. Psychiat.*, 1957, 77, 259-266.—"An electroencephalographic study of the characteristics, sites of origin, and projection of hypoglycemic seizures in the restrained, noncurarized rabbit... reveals that the seizures (insulin-induced) arise in and may be confined to the amygdala and/or the hippocampus. Severe seizures may project to the preoptic, hypothalamic, and other brain stem regions without reaching the frontal or limbic cortical area." These and other findings are discussed in relation to theory and treatment. 30 references.—L. A. Pennington.

2411. Trofimov, N. M. K mekhanizmu induktsionnykh vzaimootnosheniy signal'nykh sistem. (On the mechanism of inductive interrelations of the signal systems.) *Zh. vyssh. nervn. Deiatel'*, 1955, 5, 816-824.—In healthy people "with light forms of pathological weakness of the nervous system" predominance of the second signal system over the first is observed. Intensified activity of the former with its relative predominance induces inhibition of the functions of the latter in accordance with the law of negative induction. In the psychasthenic by virtue of the sharp predominance of the second signal system there is sharper inhibition of the function of the first. With relative predominance of the function of the first signal system in hysterics, the function of the second is more sharply inhibited in accordance with the law of negative induction.—I. D. London.

2412. Usov, A. G. Variant kompleksnoy metodiki dlia issledovaniya vysshego nervnoy deiatel'nosti zdorovykh i psikhicheskoy bo'lynykh liudei. (Variant of a joint set of methods for study of higher nervous activity in the healthy and the psychotic.) *Zh. vyssh. nervn. Deiatel'*, 1955, 5, 825-831.—The joint study of verbal reactions, conditioned motor and autonomic reflexes "guarantees a fuller elucidation of the features of the course of the basic nervous processes of the cortex and subcortex and that of the interaction of the signal systems."—I. D. London.

2413. van Harreveld, A., Stamm, J. S., & Christensen, E. Spreading depression in rabbit, cat and monkey. *Amer. J. Physiol.*, 1956, 184, 312-320.—Species differences were found to exist in the consistency and frequency with which spreading depression (SD) can be elicited in rabbits, cats and monkeys during the first hours after exposure of the cortex. In the rabbit SD could be produced consistently at 6-10 minute intervals. In the cat it was also possible to produce a series of SD's but only when using a longer interval (15-20 min.) between stimulations. Only rarely was it possible to obtain in the monkey a series of SD's even when long intervals were interjected between the stimuli. However, most of the monkey preparations responded at least once with a SD.—J. P. Zubek.

2414. van Harrenveld, A., Terres, G., & Dernburg, E. A. Cortical discontinuity and propagation of spreading depression. *Amer. J. Physiol.*, 1956, 184, 233-238.—The transmission of spreading depression across a cut severing all layers of the cortex was studied in preparations in which 3 weeks to 3 months was allowed for healing of such an injury. No unequivocal signs of transmission of the spreading depression across the scar was observed, although in some cases the scar was less than 0.1 mm. wide. The failure of transmission of spreading depression across a scar does not support the concept that the slow potential change is the agent involved in the propagation of this phenomenon.—J. P. Zubeck.

2415. Volokhov, A. A. Problemy postnatal'nogo razvitiia nervnoi sistemy zhivotnykh i cheloveka. (Problems of postnatal development of the nervous system in animals and man.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 168-172.—In Nov., 1956, a conference on postnatal development of the nervous system was held in Prague. Those papers which were devoted to the "development of the functions of the central nervous system, in particular of higher nervous activity" are abstracted and commented upon.—I. D. London.

2416. Voronin, L. G. Voprosy fiziologii vysshei nernoï deiatel'nosti na XX mezhdunarodnom kongresse fiziologov. (Problems of physiology of higher nervous activity at the 20th International Congress of Physiologists.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 157-163.—An account is given of the 20th International Congress of Physiologists along with abstracts of a number of papers related to the physiology of higher nervous activity. Interest in Pavlovian theory among foreigners is increasing, and one finds increased application of conditioned-reflex methodology abroad, though there still is failure to apply those new methods of research "which do not disturb the wholeness of the organism."—I. D. London.

2417. Weiss, Stuart; Levy, Irwin; Smith, David, & O'Leary, James L. Loss of right hemisphere due to natural causes. *EEG clin. Neurophysiol.*, 1956, 8, 682-684.—The case has particular interest because of a thalamic syndrome of unremitting pain upon her hemiplegic left side, and other evidence that she could recognize stimuli there. In the absence of thalamic relay and association nuclei, and with no appreciable remainder of the midline thalamus, it is hypothesized that the recognition of pain could only have occurred by paths leading to the homolateral thalamus, or alternatively in the brain stem reticular substance.—R. J. Ellingson.

(See also Abstracts 2525, 2542, 2570, 2575, 2584, 2604, 2606, 2607, 2619, 2624, 2631, 2633, 2677, 2963, 3128, 3132, 3156, 3166, 3174, 3184, 3193, 3202)

RECEPTIVE & PERCEPTUAL PROCESSES

2418. Attneave, Fred, & Arnoult, Malcolm D. The quantitative study of shape and pattern perception. *Psychol. Bull.*, 1956, 53, 452-471.—There is a need to extend the traditional psycho-physical methods to include the analysis of shapes or patterns. Heretofore studies designed to determine how form perception is influenced by various extrinsic factors have employed arbitrarily designed stimuli. This

paper proposes several methods "for drawing 'random' patterns and shapes from clearly defined hypothetical populations, to which experimental results may then be generalized with measurable confidence." 27 references.—W. J. Meyer.

2419. Bianki, V. L. Sluchai vyrobotki simmetrichnoi differentsirovki s kozhi sobaki. (Instance of the elaboration of tactile symmetrical differentiation in the dog.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 286-291.—Using acid reinforcement in the mouth, it has proved possible to elaborate in the dog tactile symmetrical differentiation.—I. D. London.

2420. Corso, John F. The neural quantum theory of sensory discrimination. *Psychol. Bull.*, 1956, 53, 371-393.—A detailed description of the theory of the neural quantum of sensory discrimination along with a critical analysis of the empirical studies derived from the theory are presented. While there are several methodological and statistical limitations placed on the available evidence, "it may be concluded that in certain investigations rectilinear psychometric functions have been obtained. The existence of the integral relation, contrariwise, has seldom been demonstrated. Thus, when both factors are considered in the body of available evidence, it appears that unequivocal support of the neural quantum theory is, for the most part, lacking." Suggestions for better controlled studies are presented. 46 references.—W. J. Meyer.

2421. Eriksen, Charles W. An experimental analysis of subception. *Amer. J. Psychol.*, 1956, 69, 625-634.—"The subception-effect of Lazarus and McCleary (see 25: 7840) was analyzed as a problem in partial correlation. . . ." 2 groups were "conditioned to give concurrently a GSR and a verbal response to a square of a given size." Following this conditioning, generalization-trials were given. One group of 10 S's were permitted 11 different verbal responses, the other group of 20 S's were permitted but 2. Subception-effects, as indicated by GSR-generalizations, were found in both groups. More generalized verbal responses were given by the group permitted only 2 verbal categories. The point is made that so far it does not seem necessary to assume that subception requires a concept of unconscious discrimination.—R. H. Waters.

2422. Fraisse, P. Les effets de centration perceptive. (The effects of central focus in perception.) *Psychol. franç.*, 1957, 1(2), 20-21.—Reference is made to the phenomenon of centration described by Piaget, whereby objects in the center of the perceptual field are overestimated in magnitude compared with objects peripherally placed. Using visual stimuli tachistoscopically presented the author obtained data which indicate that the phenomenon is more correctly explained in terms of relative direction of attention rather than centrality of stimulus locus.—B. A. Maher.

2423. Guedry, F. E., Jr. Some effects of interacting vestibular stimuli. *USA med. Res. Lab. Rep.*, 1957, No. 261. ii, 14 p.—Data from a turntable apparatus was investigated to determine the subjective vestibular reaction to a positive angular acceleration followed by negative angular acceleration without an intervening period of constant angular velocity. 2 theoretical variables were compared with the experimental datum. The study suggested that the vestibular response is consistent and predictable

where stimuli approximate conditions of motion encountered under normal living conditions. 21 references.—R. V. Hamilton.

2424. Hirsh, I. J., Bilger, R. C., & Deatherage, B. H. The effect of auditory and visual background on apparent duration. *Amer. J. Psychol.*, 1956, 69, 561-574.—"Eight O's were instructed to respond to a tone or light, whose duration was randomly set at 1, 2, 4, 8, or 16 sec., by pressing a button that again turned on the tone or light for a length of time considered by O equal to the original stimulus-duration. . . . Experimental conditions were so arranged that the dark or light (or quiet or noise) environment during stimulation could be changed to light or dark (noise or quiet) during the response." Results indicate that apparent duration is dependent upon the level of auditory stimulation and is independent of the level of visual stimulation.—R. H. Waters.

2425. Jenkin, Noël. Affective processes in perception. *Psychol. Bull.*, 1957, 54, 100-127.—The studies reported in this paper are classified into four general areas: (a) studies of size judgment; (b) studies of the relationships between physiological needs and perception; (c) studies on "selective sensitization" to positively valued stimuli; and (d) studies concerned with "perceptual defense." A section is also included on the various ways of defining the term perception. The author concludes that a need exists for further research, replication of existing studies, improved methodology, and a greater concern for theoretical objectives. 129-item bibliography.—W. J. Meyer.

2426. Johnsgard, Keith W. The role of contrast in stimulus intensity dynamism (V). *J. exp. Psychol.*, 1957, 53, 173-179.—"For the most part the results tend to support a contrast interpretation of dynamism, and it was suggested that an S-shaped function relating response strength to stimulus contrast with background could adequately account for experimental evidence thus far reported on stimulus intensity dynamism." 16 references.—J. Arbit.

2427. Mayzner, M. S. Bibliography on cognitive processes: XIII. Perception. *Psychol. Newsletter*, N. Y. U., 1957, 8, 94-111. 439 references.

2428. Moody, Helaine Lois. Perceptual defense as revealed by normal and clinically referred subjects in responses to three classes of pictorial stimuli. *Dissertation Abstr.*, 1957, 17, 1394.—Abstract.

2429. Nash, C. B. A comparison of combined and single target symbols in ESP. *J. Parapsychol.*, 1956, 20, 40-43.—Tests were made comparing success with two general types of symbols: first, targets which offered a choice between two colors, two shapes, or two numbers; secondly, targets which were identifiable in each instance by color, shape, or number. Contrary to prediction, the higher rate of success was obtained on the simpler targets, but neither the general rate of scoring nor the difference was statistically significant.—J. G. Pratt.

2430. Nielsen, W. An exploratory precognition experiment. *J. Parapsychol.*, 1956, 20, 33-39.—A subject recorded 80 sets of responses, each set containing 25 calls of ESP symbols. The responses were then matched against the order of symbols in pre-shuffled decks of cards selected on an objective

but non-inferable basis after the calls were made, and a statistically significant degree of correspondence was found. Some suggestions are given for changes in the experimental procedure in further tests.—J. G. Pratt.

2431. Patel, Ambalal Somabhai. Inhibitory potential and the effect variable in a perceptual psychomotor task. *Dissertation Abstr.*, 1957, 17, 1394-1395.—Abstract.

2432. Stilson, Donald Wyman. A psychophysical investigation of triangular shape. *Dissertation Abstr.*, 1957, 17, 905.—Abstract.

2433. Swanson, Robert. Perception of simultaneous tactual stimulation in defective and normal children. *Amer. J. ment. Defic.*, 1957, 61, 743-752.—"The subjects were given a tactual stimulation test consisting of 32 trials of single stimulation and double stimulation to the various combinations of the two hands and two sides of the face. The following results were obtained: (a) a significant decline in number of errors over trials was demonstrated and which appeared to be a function of MA; (b) a significant decline in the number of face dominant errors to the Face-Hand Test with increasing MA was found for both the normal and defective groups; (c) although the defective subjects in general made more errors to the Face-Hand Test, no significant differences were demonstrated, except that the contralateral subtest elicited a significantly greater number of errors in the defective group; (d) a significantly greater number of defective subjects made errors to homologous stimulation than did the normal subjects. However, when consideration was restricted to laterally consistent homologous errors, no significant difference could be demonstrated, although the defective subjects made more errors of this type; (e) no differences in response to either the Face-Hand Test or to homologous stimulation were found between the brain-injured and familial defectives."—V. M. Staudt.

2434. v. Dittfurth, Hoimar. Die affectiv-vegetative Kommunikation. (Versuch einer psychosomatischen Theorie der vitalen Stimmung.) (Affective-vegetative communication. (An attempt to formulate a psychosomatic theory of "vital mood.")) *Nervenarzt*, 1957, 28, 70-80.—This is the first half of a discussion on the German literature and the author's own speculations on the relationship between sense organs, perception and affect, and vegetative responsiveness. Higher and lower senses are distinguished. The former (primarily seeing and hearing) facilitate mainly perception, whereas the latter are more closely related to feelings, drives, affect and mood, and are inseparable from psychophysiological reactions of the autonomic nervous system. The lower senses are viewed as phylogenetically more primitive ways of "communication."—M. Kaelbling.

2435. Warren, Richard M., & Warren, Roslyn P. Effect of the relative volume of standard and comparison-object on half-heaviness judgments. *Amer. J. Psychol.*, 1956, 69, 640-643.—From among comparison weights, 9 men and 15 women O's were asked to select one "which feels half as heavy as the standard." The volume of the comparison-objects, weighted pill-boxes, was the same, $\frac{1}{2}$, or $\frac{1}{4}$ that of the standard. Under these conditions the comparison-object chosen was greater, equal to, and less than half

the physical weight of the standard, respectively. This indicates "that the relative densities of objects systematically influence estimates of half-heaviness.—R. H. Waters.

2436. Werner, H., Wapner, S., & Comalli, P. E. **Effect of boundary on perception of head size.** *Percept. mot. Skills*, 1957, 7, 69-71.—12 Ss were required to indicate the widths of their own heads under two conditions: (a) while E lightly touched S's temples; and (b) without being touched. Under both conditions head width was overestimated. Further, overestimation decreased under light touch of temples. The findings suggest that lack of clear boundary between head and environment is one factor making for overestimation of head size.—C. H. Ammons.

2437. Williams, Leon Goff. **Perceptual structuring of sequences of statistically dependent events.** *Dissertation Abstr.*, 1957, 17, 1397-1398.—Abstract.

(See also Abstracts 2268, 2386, 2491, 2542, 3234)

VISION

2438. Bartley, S. H. **Light adaptation and brightness enhancement.** *Percept. mot. Skills*, 1957, 7, 85-92.—The existence of 4 kinds of end-results found in dealing with intermittent stimulation was pointed out. Since all of these facts do not seem to be commonly regarded in connection with each other in the literature, their interrelations were discussed. Several ways of determining the relative effectiveness of steady and intermittent stimulation were described. The purpose of the discussion aside from the one just implied was to further the interest in and the study of brightness enhancement.—C. H. Ammons.

2439. Boynton, Robert M., & Kandel, Gillray. **On responses in the human visual system as a function of adaptation level.** *J. opt. Soc. Amer.*, 1957, 47, 275-286.—Thresholds are determined at various short times before and after the onset of a 38-mL conditioning stimulus in the dark-adapted eye, and following six other levels of pre-adaptation. An outstanding feature of the results is that under certain conditions thresholds decrease with increasing pre-adapting luminance. The results are considered to provide an indirect picture of on-responses in the visual system. The relation between "masking" associated with these on-responses and those effects attributable to photochemical bleaching is assessed and discussed.—F. Ratliff.

2440. Christensen, George Milford. **The relationship between visual discrimination and certain personality variables.** *Dissertation Abstr.*, 1957, 17, 901.—Abstract.

2441. Deatherage, Bruce H. **An explanation of Du Mas's "radial illusion."** *Amer. J. Psychol.*, 1956, 69, 671-672.—Du Mas's "radial illusion" (see 31: 2243) can be explained in terms of the line of sight of O, and the relative motion of the falling rain with respect to the forward motion of the car.—R. H. Waters.

2442. Fedorov, N. T. **K voprosu ob osnovnykh zakonmernostyakh v oblasti tsvetovogo kontrasta.** (On basic principles in the field of color contrast.) *Biofizika*, 1956, 1, 178-182.—The author demonstrates that the criticisms directed against his research by M. S. Smirnov and M. M. Bongard (see 32: 2472)

are marked by a "whole series of not only experimental errors, but also theoretical errors and misunderstandings, which nullify all their deductions and conclusions."—I. D. London.

2443. Fisher, Carolyn; Hull, Chester, & Holtz, Paul. **Past experience and perception: Memory color.** *Amer. J. Psychol.*, 1956, 69, 546-560.—3 experiments, employing 7, 37, and 15 O's were conducted to test the influence of "psychophysical variables vs. the effect of past experience (or expectation) on the perception of the color of stimulus-figures physically identical in color." Such variables, although they were not clearly isolated, were found to exert an important influence. Among such variables, form, contour, area, and the ratio of perimeter to area are apparently included. It appears that the operation of these factors makes the role of expectation a difficult one to assess.—R. H. Waters.

2444. Fletcher, Dorothy Elvira. **The effects of moderate and low luminances and various durations of pre-exposure on dark adaptation.** *Dissertation Abstr.*, 1957, 17, 1393-1394.—Abstract.

2445. Forbes, Alexander, & Deane, Helen Wendler. **Color discrimination by the turtle retina.** *Science*, 1957, 125, 746-747.—Abstract.

2446. Fry, Glenn A. **Visual problems in industry. Part III.** *Amer. J. Optom.*, 1957, 34, 137-145.—The very general discussion is continued under the following headings: VII—mechanisms for focusing a clear image upon the retina; VIII—optical aids other than corrective lenses; IX—fixation and convergence; X—mechanisms for recording impressions in the retina and transmitting them to the brain; XI—interpretation of retinal impressions arriving at the brain; XII—seeing with comfort; XIII—visual fatigue; XIV—permanent impairment of vision and health. 36 references.—T. Shipley.

2447. Gallup, Howard Frederick. **Receptor contribution to the critical flicker frequency curve.** *Dissertation Abstr.*, 1957, 17, 1132-1133.—Abstract.

2448. Ghent, Lila. **Perception of overlapping and embedded figures by children of different ages.** *Amer. J. Psychol.*, 1956, 69, 575-587.—The perception of overlapping realistic figures and of overlapping and embedded geometric figures was studied in 2 experiments. 99 4- to 13-year-old children served in the first and 34 children from 4 to 8 years of age served in the second. Overlapping realistic and geometric figures are easily reported even by the youngest children. Perception of embedded figures is difficult but improves with practice. The major factor causing poor performance with the embedded figures is apparently the commonality of boundaries between the figures.—R. H. Waters.

2449. Gilbert, Jeanne G. **Age changes in color matching.** *J. Geront.*, 1957, 12, 210-215.—Age changes in color matching was examined in 160 male and 195 female subjects aged 10 to 93 years. Ability scores reached a maximum in the twenties with a subsequent steady decline. Shade and sex differences with age were noted.—J. Botwinick.

2450. Granger, G. W. **Night vision and psychiatric disorders: A Review of experimental studies.** *J. ment. Sci.*, 1957, 103, 48-79.—Psychiatric patients tend to have higher intensity thresholds than normals during the course of dark-adaptation, differ-

ences being clearest under conditions of scotopic rather than photopic vision. Possible psychophysiological mechanisms are discussed under sensory, motor and perceptual factors. 122 references.—*W. L. Wilkins.*

2451. Grosvenor, Theodore Park. The effects of duration and background luminance upon the brightness discrimination of an amblyope. *Dissertation Abstr.*, 1957, 17, 1133.—Abstract.

2452. Haefner, R. A decade of research in color blindness. *Psychol. Newstr.*, N. Y. U., 1957, 8, 128-148.—An extensive amount of work on color blindness during the period 1945-1955 is given and it is organized around the following headings: (a) classification and terminology; (b) normal versus defective color vision; (c) characteristics of color defect; (d) physiological bases of color defect; (e) incidence of color defect; (f) origin of color defect; (g) measurements of color defect; (h) theories of color defect; (i) research possibilities in color defect. 132 references.—*M. S. Mayzner.*

2453. Herman, D. T., Lawless, R. H., & Marshall, R. W. Variables in the effect of language on the reproduction of visually perceived forms. *Percept. Mot. Skills*, 1957, 7, 171-186.—The present study made use of the Carmichael, Hogan, and Walter stimulus materials to investigate the influence of set and exposure time on the frequency of language-influenced reproductions. Detailed analysis of control S's responses was made. The procedure yielded a larger percentage of language-influenced reproductions than found by CHW. Ss given instructions to view stimulus figures with the intention of reproducing them later drew significantly fewer language-influenced reproductions than Ss not given these instructions. A strong tendency was found for Ss to draw more language-influenced reproductions for shorter exposures. Control Ss, given neither word list prior to figure exposures, reproduced figures which resembled objects named by the two word lists different only by chance from Ss given either word list.—*C. H. Ammons.*

2454. IArbus, A. L. Vospriatie nepodvizhnogo setchatohnogo izobrazheniia. (Perception of a stationary retinal image.) *Biofizika*, 1956, 1, 435-437.—An image which is stationary on the retina ceases to be perceived after several seconds. Once perception has disappeared, it does not reemerge as long as illumination and position of the retinal image remains unchanged.—*I. D. London.*

2455. Ikuta, Hiroyuki. (Displacement in figural after-effect and simultaneous illusions.) *Jap. J. Psychol.*, 1956, 27, 218-226.—The amount and direction of displacement was studied when the stimulus dots were presented either successively or simultaneously, using both solid and contour figures. In general, displacement was greater in the after-effect phenomenon than in simultaneous presentation. Köhler's principle was not found to be verified under all conditions. English abstract, p. 256-257.—*J. Lyons.*

2456. Ito, Mitsuyo. (Measurement of field forces in visual perception by the flicker-fusion method.) *Jap. J. Psychol.*, 1956, 27, 209-217.—As part of a study of the effect of a figure on its ground, the cff of a point projected from varying distances on figures of different shapes and light intensity was measured. The cff value was affected by all three

variables, the results being in agreement with previously presented theoretical and empirical data. English abstract, p. 255-256.—*J. Lyons.*

2457. Kuroda, Teruhiko. (Three experimental studies of the apparent size of moving objects.) *Jap. J. Psychol.*, 1956, 26, 376-385.—The apparent size and distance of moving objects were studied by means of the Ittelson-Kilpatrick trapezoidal window. Differences were obtained as a function of S's experience with the stimuli, of binocular as opposed to monocular viewing, and of the kind of movement (tangential or radial) of the object. English abstract p. 427-428.—*J. Lyons.*

2458. Massucco Costa, Angiola. Fenomenologia della percezione visiva tridimensionale in rapporto con la "transactional theory": Parte seconda. Analisi critica di dimostrazioni sperimentali dei transazionisti. (The phenomenology of three-dimensional visual perception in relation to transactional theory: Part two. A critical analysis of the experimental demonstrations of the transactionalists.) *Arch. Psicol. Neur. Psich.*, 1956, 17, 1023-1060.—A presentation of original demonstrations and experiments follows discussion of the assumptions of transactional theory. Transactional analysis of perception demonstrates that it is not univocal but shows variations explainable by Brunswik's hypothesis. Perception is an active and fallible attempt to discriminate which evolves from the child's dependence on proximal stimuli to greater reliance on distal stimuli, 25 references. English, French, and German summaries.—*E. Rosen.*

2459. Morris, Clarence W. Constancy of the ACA ratio. *Amer. J. Optom.*, 1957, 34, 117-127.—A critical discussion of the various experimental reports on the stability of the AC-A ratio is presented. The AC-A ratio has been diversely defined in terms of A as actual accommodation, as the magnitude of stimulus to accommodation or as the accommodative effort. Part of the controversy is due to this confusion of definition. Uncertainty in the neurology is also noted. Two cases are reported wherein comparisons with laboratory haploscopic measurements are possible. The results give evidence in favor of the Fry technique. General clinical stability is also noted, and the clinical importance of the AC-A ratio is stressed. 17 references.—*T. Shipley.*

2460. Mote, F. A., & Forbes, Lyman M. Changing pre-exposure and dark adaptation. *J. opt. Soc. Amer.*, 1957, 47, 287-290.—"The dark adaptation of two subjects was measured following pre-exposures that changed from zero to maximum intensity and the reverse, from maximum to zero, as well as for equivalent unchanging pre-exposures. Three intensities and four durations of pre-exposure were investigated. The main effects found were between the two changing conditions: for most of these the zero to maximum intensity resulted in higher initial thresholds and longer times to reach the final dark-adapted threshold than the equivalent condition in which the pre-exposure was from maximum to zero."—*F. Ratliff.*

2461. Niuberg, N. D. Soveshchanie po fiziologicheskoi optike. (Conference on physiological optics.) *Biofizika*, 1956, 1, 189.—A discussion was held on the methodology of color vision in insects from which it was concluded that in the biophysics

of vision "conditioned-reflex methodology should be combined with biophysical methods, in particular, electrophysical methods."—*J. D. London.*

2462. Obonai, Torao, & Asami, Chizuko. (The construction of a psychologically uniform Gray scale.) *Jap. J. Psychol.*, 1956, 26, 393-399.—A new gray scale was constructed by modification of the Lagorio scale. For conditions of daylight with white background, the formula is: $\Delta R/R = (-.0903) \log R + .2429$, where R is the relative reflectance of the grayness; the coefficients will change with different conditions. English abstract, p. 429-430.—*J. Lyons.*

2463. Obonai, Torao, & Kuzuhara, Shunsaku. (An explanation of directional illusion in terms of retinal curvature.) *Jap. J. Psychol.*, 1956, 27, 87-93.—Observations are presented of a figure which gives rise to the "directional illusion." The data support the senior author's thesis that the illusion results from displacements occurring when a plane surface is projected on the curved surface of the retina. English abstract, p. 170-171.—*J. Lyons.*

2464. Overton, Eleazer C. Factors that influence personality behavior of high school students. *Optom. Wkly.*, 1957, 48, 583-586.—Using the Orthorater, with high-school students, rank-difference correlations were run between scores in visual skills and scores on the Thurstone Primary Mental Abilities Test. Several significant positive correlations are noted, particularly for the boys with better near- and poorer far-visual acuity. A positive rating with the Washburne Personality Inventory is also reported for the boys. "In analyzing the girls' scores, no clear cut individual differences could be found. . . ."—*T. Shipley.*

2465. Oyama, Tadasu. (Experimental studies of figural after-effects: III. The displacement effect.) *Jap. J. Psychol.*, 1956, 26, 365-375.—The satiation theory of Köhler and Wallach in regard to figural after-effects was tested by studying various spatial factors determining the displacement of the test dot from the inspection dot. It is concluded that the proposed mosaic model cannot explain the phenomenon. 26 references. English abstract, p. 426.—*J. Lyons.*

2466. Parducci, Allen, & Brookshire, Kenneth. Figural after-effects with tachistoscopic presentation. *Amer. J. Psychol.*, 1956, 69, 635-639.—"Visual figural after-effects were obtained with I- and T-exposures of less than 1 sec. The magnitude of after-effects increased with the duration of the I-exposure and decreased with the duration of the T-exposure . . . (and was unaffected by) variation of the I-T interval." Results are based on 42 experimental and 6 control O's.—*R. H. Waters.*

2467. Rock, Irvin. The orientation of forms on the retina and in the environment. *Amer. J. Psychol.*, 1956, 69, 513-528.—A series of 8 experiments with O's of from 10 to 30 was conducted in a study of the following question: What is the relative effect of retinal vs. environmental orientation of a figure upon its recognition by an observer? Both geometrical and ambiguous forms were examined. Results indicate that when the 2 orientations are brought into opposition, they may so balance each other that the choice of the one or the other is a chance matter. In other instances where one determinant is more effective, it is probable that the advantage is not so

great that it can override chance factors completely.—*R. H. Waters.*

2468. Roelfs, C. Otto, & Zeeman, W. P. C. Apparent size and apparent distance in binocular and monocular distance. *Ophthalmologica*, 1957, 133, 188-204.—Size and distance apparent differences from retinal image sizes are "due to a tension between the convergent impulses, which tension is aroused by the concerned retinal stimuli." Monocular sizes and distances are judged smaller than binocular. This the authors attribute to stronger monocular convergent impulses. Higher targets in the field are judged larger and farther away than lower; and temporal positions are seen larger than nasal ones, again due to convergent differences. Likewise rights are seen larger than left positions. "No satisfactory explanation could be given for this." French and German summaries.—*S. Renshaw.*

2469. Samsonova, V. G. Znachenie razlichnykh zven'ev uslovnogo refleksa dlia analiza zritel'nykh razdrazhenii v razlichnykh uslociakh vzaimodel'stviia signal'nykh sistem. (Significance of various links of the conditioned reflex in analysis of visual stimulation under different conditions of interaction of the signal systems.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 185-200.—The limit of differentiation (perception threshold of depth) remains unchanged if one simple stable motor reaction, acting also as indicator, is replaced by another previously stabilized. In case new, non-stabilized movements, simple or complex, are effected, fine differentiations undergo changes. Substitution of a verbal for a motor response, effected at the beginning of elaboration of differentiation, rapidly makes it much more precise; when effected after stabilization of the finest differentiations, it leads to coarser visual analysis. When a modified reversal of the signal meaning of stimuli is sought, there results a profound and prolonged disturbance of all previously formed motor conditioned reactions and a considerable derangement of visual differentiations. The replacement of motor by verbal reactions, effected during the derangement of differentiations following this reversal, results in the restoration of the differentiation.—*I. D. London.*

2470. Schweitzer, N. M. J., & Bouman, M. A. Threshold measurements on the light reflex of the pupil. *Ophthalmologica*, 1956, 132, 286-288.—Abstract.

2471. Seletskaja, L. I. K voprosu o vospriiatii polarizatsii sveta solzhnym glazom pchely. (On the perception of polarization of light by the complex eye of the bee.) *Biofizika*, 1956, 1, 155-157.—Action currents in the visual lobe of the bee's brain demonstrate that its eye does distinguish alterations in the plane of polarization of light, confirming thereby the conclusions of Frisch on this question.—*I. D. London.*

2472. Smirnov, M. S., & Bongard, M. M. O kontrastnykh tsvetakh. (On contrast colors.) *Biofizika*, 1956, 1, 174-177.—It is shown that "not only the theoretical, but also the experimental bases of the research of N. T. Fedorov contain serious errors" which "completely render senseless the curves of spectral sensitivity of receptors of the eye procured by him."—*I. D. London.*

2473. Smirnov, M. S., & Bongard, M. M. Porogovy i kolorimetricheskii metody izucheniia tsvetovogo zreniia. (Threshold and colorimetric meth-

ods for studying color vision.) *Biofizika*, 1956, 1, 158-162.—After a consideration of the potentialities of both threshold and colorimetric methods for studying color vision, it is concluded that, with the exception of certain types of studies on adaptation where speed of measurement is a factor, colorimetric methods are without question superior in spite of the simplicity of threshold methods.—*I. D. London*.

2474. Swink, Clyde Wallace. An analysis of subjective colors observed in black and white grating patterns. *Dissertation Abstr.*, 1957, 17, 905-906.—Abstract.

2475. Tada, Haruo. (Overestimation of farther distance in depth perception.) *Jap. J. Psychol.*, 1956, 27, 204-208.—The assumption that in visually bisecting a distance the most distant half is objectively longer than the closer was tested for comparatively short distances (2-5 meters.) Under binocular conditions in which the visual cue was probably convergence, the assumption was found to hold. English abstract, p. 254-255.—*J. Lyons*.

2476. Ten Doesschate, G., & Ten Doesschate, J. The influence of the state of adaptation on the resting potential of the human eye. *Ophthalmologica*, 1956, 132, 308-320.—The resting potentials of the rods and cones show opposite polarities (rods +, cones -). During dark-adaptation the steady potential of both cones and rods increases. The shape of the curve is determined by the different time characteristics of cone and rod adaptation. 18 references.—*S. Renshaw*.

2477. Vitenzon, A. S. Izuchenie nervnykh processov po techeniiu zritel'nykh sledovykh reaktsii pri nedosypanii. (Study of nervous processes in the course of visual trace reactions with insufficient sleep.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 212-217.—Utilizing visual trace reactions (afterimages) as indicators of the state of the nervous processes, a study was undertaken of the kinds of disturbances that are induced in higher nervous activity by insufficient sleep and their dependence on the typological characteristics of the nervous system of the subjects. One night's reduced sleep leads in most cases to a disturbance of the course of visual trace reactions, a longer latent period, a shorter or disrupted reaction, and an alteration of the relationship between the intensity of the stimulation and the usual trace effect.—*I. D. London*.

2478. Winch, G. T. Recent developments in photometry and colorimetry. *Trans. Illum. Engng Soc., Lond.*, 1956, 5, 91-116.—"New tungsten filament secondary standard lamps are described and also tubular fluorescent secondary standards which, when used in an international photometric and colorimetric interchange, showed good agreement on measurements. Possible improved future changes in the C.I.E. data and the effect these may have on photometric and colorimetric values are indicated. New developments in physical photometry and colorimetry are described, including preliminary experience with photon counting techniques as a means of increasing sensitivity. Improved photometric integrator paint is described, as this is now necessary in order to meet the new accuracy requirements. Brief reference is made to color-rendering properties of light sources in connection with attempts to relate this subjective effect with objective measurements. The future possi-

bility of applying ultrasonic modulation to color measurement is indicated."—*R. W. Burnham*.

(See also Abstracts 2372, 2424, 2548)

AUDITION

2479. Campbell, Byron A. Auditory and aversion thresholds of rats for bands of noise. *Science*, 1957, 125, 596-597.—"The purpose of the present study . . . was to develop a technique for comparing the drive and cue properties of a specific stimulus dimension—in this case, noise." Auditory thresholds of rats for bands of random noise are compared with the aversion thresholds of rats for the same bands of noise. "For all practical purposes, those stimulus intensities which fall between the auditory and aversion thresholds can be described as having cue value, while those falling at and above the aversion threshold can be considered to have both drive and cue value."—*S. J. Lachman*.

2480. Cox, J. R., Benson, R. W., & Niemoeller, A. F. A mobile laboratory for group hearing tests. *Noise Control*, 1957, 3, 44-48; 92.—In conjunction with a hearing measurement and conservation program within the U. S. Navy, the Central Institute for the Deaf designed a mobile field laboratory. This laboratory, constructed on a tractor trailer body, is mobile; provides high sound attenuation; and contains all of the necessary instrumentation for the hearing program.—*I. Pollack*.

2481. Gershuni, G. V. Obshchie rezul'taty issledovaniia deiatel'nosti zvukovogo analizatora cheloveka pri pomoshchi raznykh reaktsii. (General results of investigation of the activity of the auditory analyzer in man by means of various reactions.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 13-24.—Various quantitative indices of absolute and differential auditory thresholds were studied utilizing the following reactions: verbally conditioned reactions, conditioned eye-lid movements, skin-galvanic, and electrocortical reactions. It was found that (1) "absolute auditory thresholds and differential threshold for the frequency and intensity of pure tones can be measured in man with the help of these reactions as reliably as by means of verbal responses"; (2) "in some cases conditioned reflexes have appeared which are subthreshold within 1 to 6 decibels in relation to the verbal response"; (3) "changes in absolute and differential sensitivity reaching 25-30 decibels can be discovered, depending on the conditions under which the reactions occur"; (4) "preliminary excitation of certain parts of the motor system is one of the important conditions determining the changes in the analyzer sensitivity." The author asserts the "unfitness of those schemes of analyzer activity, which ignore the significance of two-way connections in the integral organism."—*I. D. London*.

2482. Jerger, James F. Auditory adaptation. *J. acoust. Soc. Amer.*, 1957, 29, 357-363.—Auditory adaptation is the term employed to describe the loss of sensitivity of the ear associated with continuous exposure. The experimental technique employed was a median-plane localization balance between one ear continuously exposed and one ear intermittently exposed. Auditory adaptation increased as the tone frequency increased to 1,000 cps and was relatively constant for higher frequencies. Auditory adaptation

increased as the intensity of the tone increased. A comparison with the results of other investigators, employing various experimental techniques, is presented.—*I. Pollack.*

2483. McPherson, Robert R., & Birdsall, Theodore G. Auditory threshold. *J. acoust. Soc. Amer.*, 1957, 29, 393-394.—Several workers have interpreted the findings of threshold studies to indicate that the threshold is significantly affected by the set or criterion of response. An alternative explanation is offered. Instructional differences are associated with a trading of a higher false alarm rate with a higher detection rate corresponding quantitatively to the normal statistical decision model.—*I. Pollack.*

2484. Miller, Maurice Herbert. Clinical application of paired masking enclosures in pure tone air and bone conduction testing of subjects having a differential in the hearing acuity of the two ears of thirty decibels or more. *Dissertation Abstr.*, 1957, 17, 1042.—Abstract.

2485. Silver, A. L. Leigh. Equal beating chromatic scale. *J. acoust. Soc. Amer.*, 1957, 29, 476-481.—"An unequal temperament is described in which the fifths and fourths of the tuning chain have the same beat rate. The equal beating chromatic scale is an excellent approximation to equal temperament; moreover it may well represent a closer approximation to Bach's 'well-tempered tuning' than does equal temperament."—*I. Pollack.*

2486. Sortini, Adam J. Skin-resistance audiometry for preschool children. *J. Speech Dis.*, 1957, 22, 241, 244.—Review of the records for 250 pre-school children tested by skin-resistance audiometry over a one year period. Of 174 potential hearing aid users, 155 were fitted as soon as possible. The probable etiology of the hearing losses is also considered.—*M. F. Palmer.*

2487. Tasaki, I. Hearing. *Annu. Rev. Physiol.*, 1957, 19, 417-438.—Material is reviewed and discussed in terms of the following major topics: Electroanatomy of the cochlea, Origin of cochlear microphonics, Pattern of motion of the cochlear partition set up by sound, nerve impulses in auditory nerve fibers, auditory pathway and cortex, and other developments. 142 references.—*M. J. Wayner, Jr.*

2488. Tonndorf, Juergen. Fluid motion in cochlear models. *J. acoust. Soc. Amer.*, 1957, 29, 558-668.—The distribution of fluid motion within a cochlear model was studied as a function of the model and excitation parameters. The major results described by Békésy in 1938 were confirmed and extended. Standing waves were never observed; presumably, because of the development of eddy currents.—*I. Pollack.*

2489. Tunturi, A. R. Masking of cortical responses in middle ectosylvian auditory area of the dogs. *Amer. J. Physiol.*, 1956, 184, 321-328.—Through the use of such auditory stimuli as noise, pure tones and the "p" pulse the masking of cortical responses in the middle ectosylvian (MES) auditory area of the dog was studied by oscillographic recording. The masking curve was characterized by a low frequency slope which was less steep than the high frequency slope. The lowest threshold for masking occurred when the frequency difference of the masking tone and a masked tone was small. The curves

were wider from the low frequency end of the area than from the high frequency end. Contralateral masking was absent. Certain similarities between the masking of the cortical responses and the general phenomenon of masking in human subjects are pointed out.—*J. P. Zuehl.*

2490. Ward, W. Dixon. Method of "single descent" in group audiometry. *J. acoust. Soc. Amer.*, 1957, 29, 371-376.—A new procedure for mass-testing auditory thresholds is described. The intensity of an interrupted test tone is continuously decreased and the S is instructed to indicate "when the beeps disappear." The reliability and average values of "single-descent" thresholds compare favorably with results of more elaborate audiometric procedures.—*I. Pollack.*

2491. Weislogel, Robert L., Schwarz, Paul A., Folley, Joanne P., & Flanagan, John C. Development of experimental tests for combat arms classification. *USA TAGO Person. Res. Br. Tech. Res. Note*, 1955, No. 45. 98 p.—6 tests of general information, auditory perception, and visual perception were developed for use in classification of army personnel to the combat arms. These tests were given to 678 infantrymen. Test scores were compared with criterion ratings by associates and superiors of probable combat success and with performance on a tactical field problem. In general, reliability coefficients for the separate tests were high. Except for a high relation with aptitude area I, the tests appeared to be relatively independent of each other and of the 10 tests in the Army Classification Battery (ACB). Most promising of these potential predictors of combat effectiveness were measures of interest in military activities and active participation in various sports, inherent in the test of general information.—*TAGO.*

2492. Wever, Ernest Glen, & Vernon, Jack A. Auditory responses in the common box turtle. *Proc. nat. Acad. Sci., Wash.*, 1956, 42, 962-965.—Observations previously reported on other species of turtle are extended to *Terrapene carolina carolina* which is smaller and differs in skull structure. Inner-ear potentials show keen sensitivity in the region 100-600 cps (0.3 μ V response to sound pressure 30 db below 1 dyne/cm²), progressively poorer for higher and lower frequencies. "The tympanic membrane was found to undergo a rotational mode of movement in response to applied forces, swinging about a hinge formed by its posterior ligament."—*M. M. Berkun.*

2493. Zwislöcki, J. Some measurements of the impedance at the eardrum. *J. acoust. Soc. Amer.*, 1957, 29, 349-356.—The acoustic impedance at the eardrum was measured by 3 methods. 2 psychophysical and one physical procedure yield results that are in close agreement. Reactance increases, and resistance decreases, with test frequency to about 100 cps. For still higher frequencies, both frequencies are essentially zero.—*I. Pollack.*

(See also Abstracts 2260, 2424, 2488, 3110, 3431, 3448)

RESPONSE PROCESSES

2494. Agadzhanian, N. A. Ugashenie uslovykh dvigatel'nykh elektrooboronitel'nykh reflektsov v usloviakh razrezennoi atmosfery. (Extinction of conditioned motor-electrodefensive reflexes under rarified atmospheric conditions.) *Zh. vyssh. nervn.*

Deitel', 1956, 6, 260-268.—A "chaotic, wave-like" process of extinction is observed when a conditioned motor-electrodefensive reflex is extinguished at an altitude of 6,000 meters instead of the gradual diminution of the motor reaction customarily observed with every successive application of the unreinforced conditioned agent. The wave-like course of extinctive inhibition is particularly pronounced in a dog of the excitable type. Extinction at an altitude of 8,000 meters occurs earlier than at an altitude of 6,000 meters. The wave-like extinction of conditioned motor reflexes was also observed in the extinction of conditioned respiratory reaction, though the wave-like picture for the latter was less pronounced. At altitudes, from 8,000 meters up, the "signal activity of the cortex" is almost completely upset, everything being concentrated on "preserving the life of the organism and above all its vital centers."—I. D. London.

2495. Alexander, Richard Dale. A comparative study of sound production in insects, with special reference to the singing orthoptera and cicadidae of the Eastern United States. Volumes I and II. *Dissertation Abstr.*, 1957, 17, 1156-1157.—Abstract.

2496. Ammons, C. H., & Ammons, R. B. Motor skills bibliography: XVIII. *Psychological Abstracts*, 1948, Volume 22. *Percept. Mot. Skills*, 1957, 7, 81-84.—94 references to research on skilled behavior are selected from the 1948 volume of *Psychological Abstracts*. These references cover a range of skills: handwriting, drawing, industrial activities, etc., as well as studies of muscle action potential and speech disorders.—J. L. Coulson.

2497. Andrew, R. J. The aggressive and courtship behaviour of certain Emberizines. *Behaviour*, 1956-57, 10, 255-308.—A detailed review of literature and a report of field observations of several species of buntings with respect to a variety of activities related to aggression and mating behavior are presented. Species differences in threat postures, soliciting and copulation, wing-quivering and nest-site display, courtship displays, pair formation, sexual chases and reproductive fighting are described and illustrated. 61-item bibliography.—L. I. O'Kelly.

2498. Barber, Theodore X. Experiments in hypnosis. *Sci. Amer.*, 1957, 196(4), 54-61.—Studies involving various hypnotic phenomena on 22 normal subjects in sleep, hypnosis, and the waking state revealed similar results under the 3 conditions. Also "the subjects who were most suggestible when awake were also the most suggestible during the sleep experiment and were also the best hypnotic subjects." Persons with "the most attractive personality traits" on the Guilford-Zimmerman Temperament Survey were the most suggestible. Further studies of sleep and hypnosis are anticipated.—I. S. Wolf.

2499. Bennett, Chandler. The psychological nature of sex. *Psychoanal. Rev.*, 1957, 44, 97-105.—There is one still more final pair of opposites than that of sex, however, impersonalized. "In its final terms the sexual opposition is that of the two fusion dynamisms of life, fusing symbol and fact into reality in their opposite, complementary ways, thus literally forming life's wholly realizing partnership."—D. Prager.

2500. Bonaparte, Marie. Eros, Saül de Tarse et Freud. (Eros, Saul of Tarsus and Freud.) *Rev.*

franç. Psychanal., 1957, 21, 23-34.—The positive attitude of antiquity to Eros was superseded by the negative Christian attitude toward sexuality. Freud's contribution taught men that instinct must learn to tolerate morality as morality must learn to tolerate instinct. Analysis teaches the submission of instinct, seeking blindly to follow the pleasure principle, to the reality of social morality.—G. Rubin-Rabson.

2501. Boyarsky, L. L., & Stewart, Lauraine. Neurogenic inhibition of shivering. *Science*, 1957, 125, 649-650.—Shivering elicited by administering Nembutal and lowering the skin temperature may be inhibited by stimulating nerves from skin or muscle. "Inhibition of shivering was not limited to the segment where the stimulation was applied. No matter what region of body surface was stimulated, shivering stopped over the entire musculature of the animal." Evidence suggests that "inhibition of shivering takes place in a region of the nervous system located above the level of the spinal cord."—S. J. Lachman.

2502. Cain, J. Étude expérimentale de la situation de conflit chez l'animal. (An experimental study of a conflict situation in animals.) *Psychol. franç.*, 1957, 1(2), 18.—On the basis of experiments, not here described, the author concludes that the essentials of a conflict situation are: (a) an element of surprise; (b) the passage of a minimal time interval; and (c) the lack of a means of escape from the situation.—B. A. Maher.

2503. Chance, M. R. A. The role of convulsions in behavior. *Behav. Sci.*, 1957, 2, 30-40.—Reviewed recent research on convulsions in animals in an attempt to achieve a biological explanation of this response. Concludes that the convulsive discharge can play a part in adaptive behavior and therefore pathological only to the extent that they are not part of an integrated function. 36 references.—J. Arbit.

2504. Chinn, Herman I. Evaluation of drugs effective against motion sickness. *USAF Sch. Aviat. Med. Rep.*, 1955, No. 55-144. 10 p.—26 compounds were tested, "using soldiers and airmen crossing the North Atlantic aboard troop transports. A total of 16,920 Ss was employed." Results indicated that the most effective agents were meclizine, promethazine, and cyclizine. Susceptibility to seasickness was also investigated and found to vary inversely with age. 21 professional personnel and 23 technical assistants comprised the "Tri-Service Motion Sickness Team" in this study.—L. A. Pennington.

2505. Chumak, V. I. Ob ugasanii orientirovchnogo refleksa u kotiat v rannem postnatal'nom periode. (On extinction of the orienting reflex in kittens in the early postnatal period.) *Zh. vyssh. nervn. Deiatel'*, 1955, 5, 863-872.—The orienting reflex, elicited by olfactory stimulation during sucking in kittens, inhibits the latter reflex "in accordance with the principle of external inhibition." Repeated application of the olfactory stimulus at 2-3 min. intervals results first in diminution of duration of orienting reaction, followed by its stable absence. Its extinction follows a "wave-like course." Extinction of the orienting reflex occurs more quickly, the older the cat—a fact which bespeaks of the "maturation of the inhibitory process."—I. D. London.

2506. Ellis, Albert. Sex without guilt. New York: Lyle Stuart, 1958. 200 p. \$4.95.—Articles on various aspects of sex, appearing in *The Independent*,

a periodical, form the basis for the articles in this book. The main point of the book is that "Every human being, just because he exists, should have the right to as much (or as little), as varied (or as monotonous), as intense (or as mild), as enduring (or as brief) sex enjoyments as he prefers—as long as, in the process of acquiring these preferred satisfactions, he does not needlessly, forcefully, or unfairly interfere with the sexual (or non-sexual) rights and satisfactions of others." Topics covered are masturbation, petting, premarital sex relations, adultery, sex censorship, female frigidity, male sexual inadequacy, sex education, and male homosexuality.—*H. D. Arbitman*.

2507. Fields, P. E., Johnson, D. E., Finger, G. L., Adkins, R. J., & Carney, R. E. A field test of the effectiveness of two intensities of shaded and unshaded lights in guiding downstream migrant salmon. *Univ. Wash. Sch. Fish. Tech. Rep.*, 1956, No. 21, 1-33.—Analysis of the data from a field validation of light barriers has revealed the following significant results: (1) With all other factors partialled out there was a definite guiding effect as the result of the lighted barrier. (2) There was no significant difference in the total scores for the different light directions or levels of illumination. (3) The light barrier significantly reduced the number of fish which were trapped. (4) There were no significant differences in the effectiveness of guidance with light barriers for hatchery reared silver salmon and the wild silver migrants. (5) The distribution of steelhead and cutthroat trout trapped with the downstream migrant silver salmon also revealed significant guidance. (6) The results with a release of small hatchery reared chinooks (*O. tshawytscha*) confirmed those obtained with the silver salmon. Practical guidance was achieved in moderately clear water with light barriers which did not put any gear in the water.—*P. E. Fields*.

2508. Fisher, Alan E., & Hale, E. B. Stimulus determinants of sexual and aggressive behavior in male domestic fowl. *Behaviour*, 1956-57, 10, 309-323.—Determination of stimulus factors adequate to elicit aggressive and sexual behavior in New Hampshire and Barred Plymouth Rock males showed sexual responses to be elicited by all models in all positions, with the crouched position most effective. Males differentiated into "model reactors" and non-reactors, with the latter in the majority. Sexual responsiveness of males reared in single-breed flocks was greater to own-breed females. 15 references.—*L. I. O'Kelly*.

2509. Frol'kis, V. V., & Frol'kis, A. V. O mekhanizme adaptatsii reflektornykh reaktsii. (On the mechanism of adaptation of reflex reactions.) *Fiziol. Zh. SSSR*, 1956, 42, 854-860.—At a given stage in the development of a pathological state in the cardiac-vascular system there is observed a decrease in time of reflex adaptation. At that stage increase of reflex excitability is also noted.—*I. D. London*.

2510. Gerathewohl, Siegfried J., Strughold, Hubertus, & Stallings, Herbert D. Sensomotor performance during weightlessness. *J. Aviat. Med.*, 1957, 28, 7-12.—"A series of experiments was performed to study sensomotor performance and adaptation during the weightless condition. Subgravity and zero-gravity states were produced by flying drives at

high altitudes in a T-33A type aircraft. The result of a simple aiming test obtained from seven subjects shows that eye-hand coordination is moderately disturbed by increased or decreased acceleration. The subjects already adjusted to the situation during the first six exposures to weightlessness."—*J. M. Vanderplas*.

2511. Goy, Robert W., & Young, William C. Strain differences in the behavioral responses of female guinea pigs to alpha-estradiol benzoate and progesterone. *Behaviour*, 1956-57, 10, 340-354.—Female guinea pigs of two inbred and one heterogeneous strains were rated on latency and duration of estrus, duration of maximum lordosis, frequency of male-like mounting and percentage of heat induction following varying dosage levels of α -estradiol benzoate. Strain differences in all measures were demonstrated, but supra-liminal quantities of the hormone did not produce further changes in sexual behavior patterns. 22 references.—*L. I. O'Kelly*.

2512. Goy, Robert W., & Young, William C. Somatic basis of sexual behavior patterns in guinea pigs: Factors involved in the determination of the character of the soma in the female. *Psychosom. Med.*, 1957, 19, 144-151.—"The patterns of behavior of females raised in isolation, save for the mother during the first 25 days, were compared with those of females raised with other animals. In a second experiment, contact with other animals was withheld until adulthood." The evidence indicated that the display of feminine as well as masculine components was less by animals raised by isolation. The conclusion is reached that the organization of "the neuromuscular mechanisms mediating sexual behavior depended on a coaction between genetically determined and experiential factors. The experiential factor seemed to be more effective when the animals were young. The presence of the gonads was not necessary for the action of this factor." 41 references.—*L. A. Pennington*.

2513. Hale, E. B. Breed recognition in the social interactions of domestic fowl. *Behaviour*, 1956-57, 10, 240-254.—By "(1) pairing birds having previous experience with other breeds, (2) formation of small multibreed flocks and (c) morphological modification of dominant birds of another breed or of strangers belonging to the breed winning paired inter-breed contests" the relative importance of breed and individual recognition factors was investigated. Results indicated greater role of breed recognition. "Behavioral responses based on breed recognition without discrimination of individuals established a situation in which a single brief experience with one member of another breed had a profound influence upon subsequent reactions to other members of that breed encountered within the memory span."—*L. I. O'Kelly*.

2514. Hirsch, Jeng, & Tryon, Robert C. Mass screening and reliable individual measurement in the experimental behavior genetics of lower organisms. *Psychol. Bull.*, 1956, 53, 402-410.—"Fast breeding, prolific, small organisms are pre-eminently suited for studies in the field of behavior genetics. Their value as experimental Ss is further enhanced by the method of mass screening that succeeds in combining the objective of reliable individual measurement with that of mass observation. Hence, it is now

possible to achieve the experimental desiderata of efficiency, reliability, and brevity in the field of behavior genetics. The method is illustrated by experiments on the geotropic responses of *Drosophila*.—W. J. Meyer.

2515. Hoogland, R., Morris, D., & Tinbergen, N. The spines of sticklebacks (*Gasterosteus* and *Pygosteus*) as means of defence against predators (Perca and Esox). *Behaviour*, 1956-57, 10, 205-236.—Tests which exposed intact and de-spined sticklebacks to pike and perch showed that the spines of the stickleback are a principle anti-predator defence. Analysis of predatory behavior of the perch and pike showed that they become negatively conditioned to the stickleback in the course of a few experiences. The relationship between anti-predator defence and behavioral characteristics of the stickleback are discussed.—L. I. O'Kelly.

2516. Jones, Alfred. A study of the relationship between psychomotor performance and the physiological condition of obesity. *Dissertation Abstr.*, 1957, 17, 1134-1135.—Abstract.

2517. Kornetsky, Conan; Humphries, Ogretta, & Evarts, Edward V. Comparison of psychological effects of certain centrally acting drugs in man. *A.M.A. Arch. Neurol. Psychiat.*, 1957, 77, 318-324.—The hypothesis is tested that the "magnitude of drug-induced psychological effects is significantly related to the reactivity of the subject." It was found that the drugs causing the greatest objective impairment in functioning also had the most marked subjective effects. This and other contraindicative findings suggest "that there may be a dichotomy between the objective and subjective effects of a drug, making it impossible to predict accurately the extent of one type of effect from the extent of the other." The effects of each of the 4 drugs upon performance tests are set forth and discussed. 24 references.—L. A. Pennington.

2518. Lapina, I. A. O dlitel'nosti sokhraneniia posledovatel'nogo tormozheniia posle ugasheniia odносторонних условных рефлексов. (On the duration of maintenance of successive inhibition after extinction of unilateral conditioned reflexes.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 292-296.—By surgically isolating symmetrical parts of the dog's tongue, it proved possible to study the relationships of conditioned reflexes on one or the other side of the oral cavity. A salivation reflex, unilaterally conditioned to sound, was extinguished, resulting in a prolonged "successive inhibition" which spread to the conditioned and unconditioned reflexes of the given side. The "successive inhibition" lasted from 6 to 8 hours or longer and was terminated only on the next day. The unconditioned stimulus, applied after extinction, produced salivation in 20-25 seconds.—I. D. London.

2519. Mokhova, T. M. Elektricheskie izvleniia v korkovykh otdelakh analizatorov cheloveka pri vyrobotke dvigatel'nykh uslovnykh refleksov. (Electrical phenomena in the cortical division of the analysers in man during elaboration of conditioned motor reflexes.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 319-328.—This study was designed to examine electrical phenomena in the cortical termini of the auditory, motor, and visual analysers in normal man in the process of establishing a conditioned motor reflex to various sounds and when replacing the sounds by

words describing these sounds. Simultaneous electromyographic recordings made it possible to observe the changes in muscle potentials reflecting the motor reaction. Changes observed in the electromyogram are said to "reflect the peripheral effect of the motor reflex." Greatest intensity and duration of changes in cortical potential occur during the first combinations of indifferent stimuli with verbal reinforcement. As the number of combinations increases, the changes grow less intensive and are of shorter duration.—I. D. London.

2520. Novikova, E. G. Issledovanie vegetativnykh komponentov orientirovochnogo i uslovno-oboronitel'nogo refleksov u scheniat v ontogeneze. (Study of autonomic components of the orienting and conditioned defensive reflexes in puppies in ontogenesis.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 103-113.—The respiratory and cardiac components of the orienting and conditioned reflexes in puppies in various periods of postnatal ontogenesis were studied. As the cerebral cortex and higher subcortical centers mature morphologically and functionally, their regulatory functions are displayed and the organism's responses to external influences become improved. Thus, stabilization of a conditioned defensive reflex (the shake-off reflex) is accompanied by a gradual disappearance of the autonomic components previously characteristic of it.—I. D. London.

2521. Panchenkova, E. F. Razvitie uslovnykh refleksov u belykh krysov v ontogeneze. (Development of conditioned reflexes in white rats in ontogenesis.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 312-318.—In a study, utilizing the shake-off reflex of the head and ears of white rats in response to stimulation of the auricle area with electric current of threshold intensity, the following was shown: (1) The elaboration of a conditioned motor-defensive reflex to auditory stimuli in white rats is possible beginning with the 10-15th day of life; (2) The number of combinations of stimuli required for the elaboration of a conditioned defensive reflex to sound depends on the age of the animal. Beginning with the 17-19th day the same number of combinations is required, as a rule, to form a conditioned reflex in young as in adult rats; (3) The shake-off conditioned reflex in white rats is often attended by a general motor reaction. The older the animal, the more often the conditioned reflex is expressed in the form of general motor reaction and more seldom in shake-off movements; (4) Differentiation in white rats at an early age is elaborated with difficulty and is often deranged. In 4-month old rats differentiation proceeds faster and is usually more stable; (5) Extinction of the conditioned reflexes to sound in young rats is slow and takes 62-112 nonreinforcements.—I. D. London.

2522. Petersen, B., Lundgren, L., & Wilson, L. The development of flight capacity in a butterfly. *Behaviour*, 1956-57, 10, 324-339.—The flight characteristics of butterflies during the first few days of life were described quantitatively. Although flight improves during the first two days, this is apparently more a function of the hardening of wing cuticula than of learning or neural maturation.—L. I. O'Kelly.

2523. Pruitt, W. O., Jr. A measure of displacement activity in a lemming (*Lemmus trimucronatus*). *Behaviour*, 1956-57, 10, 237-239.—Running distance and speed in an activity wheel of a captured

lemming which was maintained in a cage with another lemming showed patterns related to social interaction between the two. Patterns characteristic of facilitation and of displacement are described.—L. I. O'Kelly.

2524. Schelsky, H. *Sociologie der Sexualiteit*. (The sociology of Sex.) Assen, Netherlands: Uitgeverij Born, 1957. 147 p. Hfl, 4.90.—A survey of modern sociological approaches to sex problems, discussing the relationships between sex, morals and society.—R. H. Houwink.

2525. Schreiner, L., & Kling, A. *Rhinencephalon and behavior*. *Amer. J. Physiol.*, 1956, **184**, 486-490.—Lesions of the rhinencephalon, primarily restricted to the amygdaloid complex, were found to modify the aggressive behavior of lynxes, agoutis, monkeys and domestic cats toward relative docility and precipitate a state of chronic hypersexuality. The docility was characterized by the failure of the animals to exhibit aggressive behavior, fear or escape activity in the presence of threatening situations which precipitated such behavior in their preoperative periods. Hypersexuality was exhibited by marked increases in copulatory activity with males and females of their own and other animal species. The authors conclude that the rhinencephalon and its diencephalic connections, in association with endocrine systems, are important regulators of emotional and sexual behavior of rodents, carnivores and primates.—J. P. Zubeck.

2526. Solovey de Milechnin, Galina. *Concerning the attributes of the hypnotic state*. *J. clin. exp. Hypnosis*, 1956, **4**, 115-126.—A discussion of: (1) "the essential attributes of the 'positive' ('empathetically-induced') hypnotic emotional state; (2) the distinguishing features of the 'negative' ('authoritarian') hypnotic emotional state; (3) 'suggestibility'—as a motivation to comply with the desires of the person who has induced either of these emotional conditions; (4) the retrogression to a more primitive form of psychological functioning: a phenomenon which is common to all sufficiently intense emotions; (5) 'hyper-suggestibility' as the peculiar behavior that is made by the coalescence of the motivation to comply with the operator's desires and the retrogressed condition." 20 references.—S. Fisher.

2527. Soullairac, Andre. *Données expérimentales sur le comportement sexuel du rat mâle*. (Experimental data regarding sexual behavior in the male rat.) *Psychol. franç.*, 1957, **1**(2), 1-9.—Copulatory behavior in the male rat was studied in terms of the number of intromissions, ejaculations and frequency and duration of the refractory period. Differential effects of anterior and posterior lesions of the hypothalamus are reported as evidenced by changes in copulatory behavior.—B. A. Maher.

2528. Svorad, D. *Paroxysmalni Utim. Experimentálna analíza "hypnozy zvierat"*. (Paroxysmal inhibition. Experimental analysis of "animal hypnosis.") Bratislava, Czechoslovakia: Slovensk. Akad. Vied., 1956. 231 p.—The subject of this monograph is "paroxysmal inhibition" in animals for which the "criteria for degree of developing inhibition are the disturbances in orientation of the animals in space or their inability to assume their normal . . . customary pose." Different species are maximally hypnotizable through different analyzers.—J. D. London.

2529. Swinyard, Ewart A., Chin, Lincoln, & Fingl, Edward. *Withdrawal hyperexcitability following chronic administration of meprobamate to mice*. *Science*, 1957, **125**, 739-741.—Experimental animals (50 male albino mice) each received large doses of meprobamate orally in acacia solution 5 times daily. Control animals (50 male albino mice) received acacia solution only. Seizures were induced by means of a Grass stimulator. In a separate series of experiments, 80 mice were divided into two equal groups, one group given orally 300 mg/kg of meprobamate and the other group the requisite volume of acacia solution. Hyperexcitability in mice following chronic administration of meprobamate is detectable 4 and 8 hours after drug withdrawal and subsides within 28 hours.—S. J. Lachman.

2530. Thackray, Richard Irving. *Studies of externally-aroused drives in the raccoon*. *Dissertation Abstr.*, 1957, **17**, 906-907.—Abstract.

2531. Tobach, Ethel. *Individual differences in behavior and alcohol consumption in the rat*. *Quart. J. Stud. Alcohol*, 1957, **18**, 19-29.—Timidity in rats, as measured in behavioral situations, is considered related to consumption of an alcohol solution in a choice situation. 30 references.—W. L. Wilkins.

2532. Webb, Wilse B. *Antecedents of sleep*. *J. exp. Psychol.*, 1957, **53**, 162-166.—Studied the relationship between sleep and three antecedent conditions: past experience, time of sleep deprivation, and an irrelevant drive level. In general found a marked individual consistency in the latency of going to sleep. Also, the major determinants of sleep latency were individual differences as opposed to the conditions imposed on the Ss. Noted that the time of sleep may be a joint function of the development of wakefulness tendencies and sleep tendencies.—J. Arbit.

2533. Weitzenhoffer, André Muller. *Hypnotic susceptibility as related to maculinity-femininity*. *Dissertation Abstr.*, 1957, **17**, 1397.—Abstract.

2534. Wilson, K. V. *Effects of size and shape differences in stimuli on disjunctive reaction time*. *Percept. Mot. Skills*, 1957, **7**, 93-96.—Disjunctive reaction times were obtained for stimulus pairs differing in size alone, in shape alone, and in combinations of size and shape. Since one stimulus was identical in all pairs, it was possible to compare the trends in reaction times as a function of the area of the other stimulus. A rapid decreasing trend was found for 5 pairs differing in shape and a less rapid trend was found for the 5 pairs differing in size. Reaction times for the 4 combinations of size and shape differences were generally lower than for the differences in size or shape alone but no trend was found.—C. H. Ammons.

(See also Abstracts 2273, 3111, 3388)

COMPLEX PROCESSES & ORGANIZATIONS

2535. Amiragova, M. G. *Vliianie tak nazyvaemogo émotcional'nogo vozbuždeniia zhivotnogo na funktsional'noe sostoiianie shchitovidnoi zhelezy*. (Influence of so-called emotional excitement of the animal on the functional activity of the thyroid gland.) *Fiziol. Zh. SSSR*, 1957, **43**, 65-73.—The distribution of radioactive iodine was studied in 40 dogs and cats at various intervals up to 7 days after administration of tagged iodine (I^{131})

and after emotional stimulation produced by confrontation of cat and dog. Considerable delay in iodine storage by the thyroid was caused by emotional spells; while iodine stored in the thyroid was discharged into the blood-stream under emotional influence. It is thought that excitation of the central nervous system interferes with thyroglobulin synthesis. The early liberation of radioactive iodine by the thyroid observed under these conditions may be due to its appearance in a preliminary form of the thyroid hormone.—*I. D. London.*

2536. Blake, Robert R., Berkowitz, Howard; Bellamy, Roy Q., & Monton, Jane Srygley. Volunteering as an avoidance act. *J. abnorm. soc. Psychol.*, 1956, 53, 154-156.—"Volunteering as a function of the relation between the attractiveness of the requested action and that of the alternative to volunteering was studied in the present experiment. 362 subjects reacted under public or private conditions to a standard volunteering request. Attractiveness was varied so that under one set of conditions volunteering would be more desirable than the alternative, while under another it would be relatively more undesirable. Under the control condition attractiveness of the alternative was not altered. Results support the predictions.—*A. S. Tamkin.*

2537. Burton, Jean Lucille. An empirical study of the effects of anxiety and failure-success upon the performance of a complex task. *Dissertation Abstr.*, 1957, 17, 1386-1387.—Abstract.

2538. Castaneda, Alfred. Reaction time and response amplitude as a function of anxiety and stimulus intensity. *J. abnorm. soc. Psychol.*, 1956, 53, 225-228.—"The present study was concerned with reaction time and response amplitude as a function of C S intensity and anxiety (Taylor scale). 5 presentations of 2 auditory stimuli varying only in intensity were given to each of 22 anxious and 22 nonanxious Ss. Increased intensity resulted in significant increases in amplitude and speed of reaction. Mean amplitude scores of the anxious group were significantly greater than those of the nonanxious group. A significant interaction was found between anxiety and intensity. . . . Significant sex differences were found on both measures. The results were discussed in terms of competing implicit response tendencies."—*A. S. Tamkin.*

2539. Desmonde, William H. Eros and mathematics: Some speculations. *Amer. Imago*, 1957, 14, 53-56.—Speculations are offered regarding the ontological basis for logic and mathematics. There is an "intimate connection between the quest for all-explaining logical or mathematical formulae and problems of sexual harmony."—*W. A. Varvel.*

2540. Dolinko, Paul. Set and conceptual defense. *Dissertation Abstr.*, 1957, 17, 1388.—Abstract.

2541. Elksich, Paula. The psychological significance of the mirror. *J. Amer. psychoanal. Ass.*, 1957, 5, 235-244.—The 3 patients cited tried to retrieve in their mirrored images what they felt they had lost or might lose: their ego, their self, their boundaries. Each of the 3 patients was gazing at his image as if through such mirroring he might restore his self-identity. 20 references.—*D. Prager.*

2542. Furchtgott, Ernest. Behavioral effects of ionizing radiations. *Psychol. Bull.*, 1956, 53, 321-

334.—The effects of high-energy radiation on pre- and neonatal development, the adult nervous system, learning and performance, and sensory functions are described. Though the number of available studies are few, there is evidence to suggest that: (1) the adult nervous system is relatively radioresistant; (2) learning functions are relatively unaffected by lethal or sublethal dosages of radiation; (3) hearing acuity and thresholds to dark adaptation increase as a result of radiation; and (4) the fetal nervous system is relatively radiosensitive. There is a need for more studies assessing the behavioral effects of radiation. 70-item bibliography.—*W. J. Meyer.*

2543. Lazarus, R. S., & Baker, R. W. Motivation and personality in psychological stress. *Psychol. Newsstr., N. Y. U.*, 1957, 8, 159-193.—An extensive account of theoretical considerations and experimental findings are presented on the role of inferred and induced motivational variables in a wide variety of psychologically stressful situations. An inventory of present and planned research problems is also presented. 16 references.—*M. S. Mayzner.*

2544. Leavitt, Harry C. Genetic relations between anxiety and fear. *Psychoanal. Rev.*, 1957, 44, 65-72.—Fear precedes anxiety development ontologically and in human development. Specific fears had to be learned before anxiety or forewarning mechanisms could be called into play. Anxiety is a connotation of fear. Neurotic anxiety forces a person to avoid irrational environmental stimuli which activate or augment repressed conflictual constellations. Anxiety forces the ego to strengthen or modify intro-psychic defenses.—*D. Prager.*

2545. Lott, George M. The story of human emotions; from a teen age viewpoint. New York: Philosophical Library, 1958. 228 p. \$4.95.—A teen age viewpoint, 18 chapters fall under two headings: adolescence, and human emotions and influencing people. The author is concerned with the problems of normal human experience, from the care of the small child, through the rebellions of adolescence, to the more common neuroses.—*G. Rubin-Rabson.*

2546. Mayzner, M. S. Bibliography on cognitive processes: XIV. Anxiety and stress. *Psychol. Newsstr., N. Y. U.*, 1957, 8, 149-158.—256 references.

2547. Mayzner, M. S. Bibliography on cognitive processes: XV. Pathology. *Psychol. Newsstr., N. Y. U.*, 1957, 8, 204-218.—370 references.

2548. Melville, Joseph R. Monocular vision and word-length as factors in differential word recognition. *Dissertation Abstr.*, 1957, 17, 1135.—Abstract.

2549. Moore, Robert Yates. Some comments on the analysis of emotional behavior. *Psychol. Rec.*, 1956, 6, 51-57.—Definitional problems associated with the concept of emotion are discussed and it is suggested that certain behavioral characteristics in emotion be salvaged for rigorous experimental investigation. The conditioned emotional response (CER) typified in infrahumans by freezing and crouching is selected for examination. Experimental settings useful for investigating the CER are described. Data relevant to the effects of the following factors on the CER are presented: (1) age at conditioning; (2) strength of CS and US; (3) electroconvulsive shock; (4) drugs; and (5) central nervous system.—*S. C. Ratner.*

2550. Pavlik, William Bruce. The effects of motivating conditions and inferred individual drive level upon individual performance in a small-group setting. *Dissertation Abstr.*, 1957, 17, 1135.—Abstract.

2551. Rhine, L. E. The relationship of agent and percipient in spontaneous telepathy. *J. Parapsychol.*, 1956, 20, 1-32.—A total of 328 reports of apparently spontaneous telepathic occurrences were analyzed for suggestions regarding the roles of the agent and the percipient. In about half of the cases neither one was consciously motivated with respect to the other. However, a basis for motivation of percipient toward agent was present in all cases, while no basis could be found for agent initiative in 16 percent of the cases.—J. G. Pratt.

2552. Scheerer, Martin, & Lyons, Joseph. Line drawings and matching responses to words. *J. Pers.*, 1957, 25, 251-273.—In four related experiments Ss were required to draw lines of their own choosing to correspond to words of physiognomic import and to physiognomically "neutral" words, and also to match familiar and unfamiliar words with given line drawings of non-pictorial content. Significant, consistent, and psychologically meaningful patterns of choice and avoidance were demonstrated. The results of this study and of those by other authors were discussed in terms of an organismic theory of a dynamic correspondence between the perceived structure of the stimulus and the total attitude of the person. 26 references.—M. O. Wilson.

2553. Selzer, Samuel. Relationships between developmental experiences and choice of defensive behavior: Study II. Females. *Dissertation Abstr.*, 1957, 17, 1389-1390.—Abstract.

2554. Sperling, Samuel J. The symbolic meaning of the corner. *J. Amer. psychoanal. Ass.*, 1957, 5, 250-266.—The corner represents unconsciously the genitalia. It may often symbolize more focal parts of the perineo-genital region. The corner is often a bisexual symbol of the phallic phase and of the correlative site of castration. "The varied manifestations of psychosexual development may be represented in the multiform characteristics of the corner and the contexts in which it appears, reflecting the multiple meanings associated with the sexual part represented." The unconscious significance of the corner is frequently met within displacements to other anatomical corners of the body such as the inguinal region, hip, knee, elbow, chin, mouth, eyes, and head.—D. Prager.

2555. Ströbl, Stefan. Eine Untersuchung über die Brille als Ausdrucksfaktor. (An investigation concerning glasses as a factor of expression.) *Z. Psychol.*, 1956, 159, 101-129.—The experiments have shown that the wearing of glasses has a modifying influence not only on the actual appearance of the wearer, but also on the judgment of the observer. Wearing of glasses shifts sympathy attitudes of the observer towards psychological and still more towards physical attributes of the wearer. Women and younger people show a greater antipathy towards glasses than do men and older people. Glasses also make the wearer appear older. In general, glasses tend to shift impression towards the negative side concerning health, adroitness, appearance, charm, emotional qualities; while a positive shift is indicated concerning diligence, drive, responsibility, and intellectual

capacities. The physiognomic effect of glasses is due to their constructional features.—K. M. Newman.

2556. Taylor, Janet A. Drive theory and manifest anxiety. *Psychol. Bull.*, 1956, 53, 303-320.—A considerable bibliography of experimental studies using the Manifest Anxiety Scale (MAS) has accumulated since its initial introduction to the research literature. The purpose of this article is to critically examine this research as it relates to drive theory and the original purposes of the scale. Experiments concerned with the relationships between the MAS and classical conditioning, stimulus generalization, maze learning, and verbal learning are presented. In addition, the relationship between anxiety and stress and the MAS and clinical measures of anxiety are explored. In general, the experimental evidence supports the notion of an interaction between anxiety level and task complexity but additional research is necessary to determine if the theory can be successfully expanded to include more complex situations than originally seemed appropriate. 49 references.—W. J. Meyer.

2557. Terstenjak, Anton. A critical study of the hypothesis of the affinity of instincts and sympathetic facial expression. *Arch. Psicol. Neur. Psich.*, 1956, 17, 1063-1092.—A group of 988 subjects of high educational level stated whether they were attracted, repelled, or indifferent to persons having physical and temperamental characteristics similar to their own. Only 32% were attracted to all characteristics similar to their own, and 12% were attracted to opposite characteristics. The remaining subjects were attracted to some of their own characteristics and repelled by others, or were attracted to the presence of their own characteristics in some people but not in others, or were indifferent. French, German and Italian summaries.—E. Rosen.

2558. Thompson, William R. Influence of prenatal maternal anxiety on emotionality in young rats. *Science*, 1957, 125, 698-699.—"The purpose of the observations reported . . . was to test the hypothesis that emotional trauma undergone by female rats during pregnancy can affect the emotional characteristics of the offspring." Emotional characteristics of the 30 control and 30 experimentals (offspring) were compared at 30 to 40 days and 130 to 140 days of age. Differences of emotionality are indicated. There are "some grounds for supposing that prenatal maternal anxiety does actually increase the emotionality of offspring."—S. J. Lachman.

2559. Twain, David C. Factor analysis of a particular aspect of behavioral control: Impulsivity. *J. clin. Psychol.*, 1957, 13, 133-136.—"The object of this study was the clarification of the concept 'impulsivity'. . . . Our hypothesis was that tests which measure aspects of behavioral control representative of 'impulsivity' upon statistical analysis will reveal the operation of more than one factor underlying such behavior. Estimates of behavioral control were gathered in group testing situations and factor analyzed. The analysis resulted in the determination of six factors which were titled: flexible motor control, physical status, positive progressiveness, tenacious self-control, and aggressive instability. Factor VI was not interpreted. The hypothesis of this study was confirmed. . . ." Among the 16 behavioral measures were height, weight, and two Thurstone attitude

scales. Rotations were done using graphic methods. 18 references.—L. B. Heathers.

2560. Weiss, Bertram Arthur. Relationships between developmental experiences and choice of defensive behavior: Study I. Males. *Dissertation Abstr.*, 1957, 17, 1392-1393.—Abstract.

2561. Weissman, Alden Ebenhart. A psychological inquiry into satisfactions and happiness. *Dissertation Abstr.*, 1957, 17, 1384-1385.—Abstract.

(See also Abstract 2708)

LEARNING & MEMORY

2562. Afrikan, E. A., & Gaske, O. D. Uslovnoreflektornai deiatel'nost' sobak posle pereznenogo barbiturovogo narkoza. (Conditioned-reflex activity in dogs after induced barbiturate narcosis.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 92-102.—In a study utilizing conditioned salivary reflexes in dogs with various types of nervous system, the following was shown: Pentothal and hexenal narcosis of a half hour or one hour duration produced changes of conditioned activity in dogs, lasting from 1 to 3-6 days. The result of pentothal and hexenal narcosis is a decrease of positive conditioned reflexes, a longer latent period and a change in the course of the conditioned salivation curve, all of which points to a weakened excitatory process. Under the influence of narcosis the process of internal inhibition weakens: differentiation is disinhibited, and successive inhibition develops. Enhanced conditioned activity was observable on the 3rd or 4th day following the administration of narcosis. After the administration of narcosis (1st or 2nd day) unconditioned reactions are depressed to a greater or lesser degree. The depth and duration of the changes in the unconditioned and conditioned reflex activity depend on the type of nervous activity of the dogs and are most pronounced in the weak type.—I. D. London.

2563. Akita, Kiyoshi. (On conditioned inhibition in human motor learning.) *Jap. J. Psychol.*, 1956, 27, 94-104.—The phenomenon of differences in post-rest performance following on spaced vs. massed pre-rest trial has been explained in terms of the Hullian construct *sIr*, or conditioned inhibition. The author offers an alternative explanation in terms of differences in level of skill achieved, and presents experimental evidence to show that the distinction between massed- and spaced-practice *Ss* appears only when the level of skill is low because of the difficulty of the task. 23 references. English abstract, p. 171-172.—J. Lyons.

2564. Alekseev, M. A., Asknazil, A. A., Zotov, A. I., & Lipatova, N. IA. Nekotorye osobennosti formirovaniia slozhnykh uslovykh dvigatel'nykh reaktsii cheloveka. (Some features of the formation of complex conditioned motor reactions in man.) *Zh. vyssh. nervn. Deiatel'*, 1955, 5, 773-782.—Data are provided and discussed which assist in the "understanding of the physiological mechanisms which lie at the basis of mastery of the motor habit and in particular of those stages of it which are characterized by psychologists as the stage of 'conscious' mastery of the habit and the stage of its 'automatization'."—I. D. London.

2565. Alekseeva, I. A. Neposredstvennoe i uslovnoreflektornoe vliianie tormoziaschikh vesh-

chestv na vysshuiu nervnuu deiatel'nost' sobak. (Direct and conditioned reflex effect of inhibitory substances on higher nervous activity in dogs.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 399-407.—Experiments were conducted on dogs in which a system of alimentary conditioned reflexes had been elaborated in order to study the effect of inhibitory substances (chloral hydrate, sodium amytal, and veronal) on this system during the action of a special conditioned stimulus—bright lighting or noise of a fan. The inhibitory substances were introduced per rectum with water or per os with milk and produced either complete inhibition of conditioned positive reflexes or the presence of a "narcotic phase." With habituation to the inhibitory substances, the administration of pure water or milk during the action of the special conditioned stimulus also brought about a pronounced inhibition of the conditioned reflexes.—I. D. London.

2566. Alluisi, Earl A., Muller, Paul F., Jr., & Fitts, Paul M. An information analysis of verbal and motor responses in a forced-paced serial task. *J. exp. Psychol.*, 1957, 53, 153-158.—Studied the effect upon a motor (key-pressing) response and verbal (number-naming) response of the rate of stimulus presentation and of the number of alternative stimuli employed. Found an increased rate of information transmission with an increase in the number of alternative stimuli and a decrease in the rate of stimulus presentation. The greater transmission rate for the verbal mode of response is explained on the basis of greater S-R compatibility (with Arabic-numeral stimuli).—J. Arbit.

2567. Anderson, Nancy Sagrid. Factors of motor skill learning as related to control loading. *Dissertation Abstr.*, 1957, 17, 1393.—Abstract.

2568. Astin, Alexander W., & Ross, Sherman. Recall of stimulus-items arranged in a square matrix. *Amer. J. Psychol.*, 1956, 69, 668-671.—The findings of an earlier study are supported and extended. The present study indicates a high correlation between temporal ordering and accuracy of recall, and no indication of reminiscence over a 5 min. interval.—R. H. Waters.

2569. Bianki, V. L. Byrabotka differentsirovannogo tormozheniia s rogov matki sobaki. (Development of differentiating inhibition [in response to stimulation] of the uterine horns in the dog.) *Fiziol. Zh. SSSR*, 1956, 42, 907-912.—A conditioned reflex, developed with acid reinforcement in response to mechanical stimulation of one portion of the uterine membrane, will manifest itself on mechanical stimulation of another part of the same uterine horn and of the symmetrical part of the opposite horn. It is possible to establish differentiation between mechanical stimuli applied symmetrically to the membrane of the two uterine horns. Differentiation involving the membrane of the same horn was not possible.—I. D. London.

2570. Borisova, T. P. Neposredstvennoe i uslovnoreflektornoe vozdeistvie kofeina na vysshuiu nervnuu deiatel'nost' sobak. (Direct and conditioned reflex action of caffeine on higher nervous activity in dogs.) *Zh. vyssh. nervn. Deiatel'*, 1955, 5, 855-862.—In conditioned-reflex action of caffeine on a "system of alimentary conditioned reflexes" there usually arises in the cerebral cortex an "inhibitory process with the presence of hypnotic phases"—the

effect of a "defensive mechanism with mobilization of protective inhibition." Conditioned inhibitory association with the action of caffeine is stable and firm. When caffeine has been introduced, particularly in small doses, in an experimental situation, the conditioned association determines the picture of its direct action of virtue of the "conditioned-reflex situational component."—*I. D. London.*

2571. Calvin, Allen D., Clancy, J. J., & Fuller, J. B. A further investigation of various stimulus-objects in discriminative learning by children. *Amer. J. Psychol.*, 1956, 69, 647-649.—5 groups of 8 S's (4 each from first and second school grades) were given the task of learning under which of 2 identical cups a toy might be found. Cue stimuli in the form of triangles of different hue, brightness, size, orientation, and a final pair consisting of a black triangle and square of equal area were provided. "It was found that it was most difficult to discriminate between stimuli varying in hue and least difficult to discriminate between stimuli varying in size."—*R. H. Waters.*

2572. Chumak, V. I. K voprosy o mekhanizme uslovnnykh refleksov na otnoshenie razdrzhitel'ei. (On the mechanism of conditioned reflexes to the relationship of stimuli.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 126-134.—In experiments on golden crucian carp, pigeons, and rabbits conditioned reflexes were elaborated to the size relationship of visual stimuli under conditions of simultaneous application of the positive and differentiation stimuli. This was followed by the "extinction of the signal value of separately applied components of the associated pair of stimuli." Extinction set in the quickest in rabbits, while in pigeons the extinction of the signal value of the positive component appeared to be a difficult task, and in fish it proved impossible to differentiate the positive component from the complex, and the differentiation of the inhibitory component was unstable.—*I. D. London.*

2573. Chumak, V. I. Uslovnys refleksy na otnoshenie razdrzhitel'ei u zolotistykh karasei, golubei i krol'kov. (Conditioned reflexes to the relationship of stimuli in golden crucian carp, pigeons, and rabbits.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 114-125.—Conditioned food procuring reflexes to size relationship were elaborated in 10 golden crucian carp, eight pigeons and four rabbits. If the visual stimuli were presented separately one at a time, the conditioned reflexes to the relationship of the stimuli developed in all the animals "simultaneously with the establishment of conditioned reflexes to the absolute properties of the stimuli and with the formation of the differentiation." "When the positive and differentiation stimuli were applied simultaneously, in a pair, the reflex to the relation was elaborated in fish after 110-180 combinations and became stable after 200-210 combinations, in pigeons—after 40-80 and 60-90, and in rabbits—after 40-70 and 90-110 combinations respectively." Conditioned reactions of animals to the relation of stimuli were observed in cases when the absolute values of the stimuli were shifted and when the figures of the basic pair of stimuli (squares) were replaced by others (triangles or crosses).—*I. D. London.*

2574. Dews, Peter B. Studies on behavior: III. Effects of scopolamine on reversal of a discrimina-

tory performance in pigeons. *J. Pharmacol.*, 1957, 119, 343-353.—The ability of pigeons to learn to repeatedly reverse a discrimination was demonstrated for a situation where they were "... rewarded alternately for pecking when a red bulb was lit but not when a blue bulb was lit and then for pecking when a blue bulb was lit but not when a red bulb was lit." Scopolamine was administered in sufficient dosage to affect performance of pigeons being trained on a discrimination. A test conducted 48 hours after the training under scopolamine showed, however, that the drug had not affected acquisition or retention of the discrimination.—*G. A. Heise.*

2575. Dmitriev, A. S. K metodike issledovaniia vysshei nervnoi deiateli noster cheloveka. (On methods of studying higher nervous activity in man.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 905-912.—Ivanov-Smolenski's method of elaborating motor conditioned responses with verbal reinforcement should be applicable for studying higher nervous activity in man. However, its application in laboratories frequently involves some difficulties. This is due to the fact that in a number of cases, and in adults very often, the subject exhibits a motor reaction only to verbal reinforcement and does not respond to the conditioned signal in spite of a large number of combinations of the direct conditioned stimulus with verbal reinforcement. Sometimes even, the conditioned reaction to a direct stimulus, though formed, is rather unstable and tends to disappear with repetition of the experiment. Cases of "nonelaboration" of the conditioned reactions occur oftener, the older the subject. Analysis of such cases shows that disturbances in the "linkage function of the cerebral cortex" are not involved, but that "inhibition of the conditioned reaction to a direct conditioned stimulus on the part of the second signal system," accounts for the nonelaboration.—*I. L. London.*

2576. Dmitriev, A. S., & Zhidkova, A. T. Vlianie uchebnogo dnia na vzaimootnoshenie pervoi i vtoroi korkovykh signal'nykh sistem. (Effect of the school day on the relationships between the first and second cortical signal systems.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 378-386.—In most subjects after a six-hour school day difficulties were observed in conditioned reactions formed with the "predominant participation of the second signal system." At the same time a shorter latent period was observed with an increase of conditioned reactions to auditory stimuli. After a school day which included from two to four hours of physical training, conditioned reactions, formed with the predominating participation of the second signal system, are performed more easily.—*I. D. London.*

2577. Easley, David Leigh. Associative inhibition as a function of temporal interval and warm-up. *Dissertation Abstr.*, 1957, 17, 901-902.—Abstract.

2578. Ellis, Norman R. The immediate effects of emotionality upon behavior strength. *Dissertation Abstr.*, 1957, 17, 1131.—Abstract.

2579. Elshina, M. A., Zimkin, N. V., & Moreva, Z. E. Obrazovanie dvigatel'nykh oboronitel'nykh uslovnnykh refleksov u myshel pri predshestvovanii bezuslovnogo razdrzhitelia uslovnomu. (Formation of motor defensive conditioned reflexes in mice when the unconditioned stimulus precedes the conditioned.) *Zh. vyssh. nervn. Deitel'*, 1955, 5, 881-891.

—In mice by means of electric stimulation stable conditioned motor-defensive reflexes are easily formed "when the beginning of action of the unconditioned stimulus precedes that of the conditioned." With reinforcement, time of precedence may be from 0.5 to 10 sec. even when the strength of the unconditioned stimulus is considerable. The conditioned reflexes, thereby elaborated, are not slower in formation or less stable than those formed when the conditioned stimulus precedes the unconditioned. A factor in the formation of the former is the fact that "earlier in different agents become signals for cessation of the action of the unconditioned stimulus."—*I. D. London.*

2580. Eriksen, Charles W., & Kuethe, James L. Avoidance conditioning of verbal behavior without awareness: A paradigm of repression. *J. abnorm. soc. Psychol.*, 1956, 53, 203-209.—31 male college students responded to a 15-item word association list receiving an electric shock immediately after 5 arbitrarily selected response words. A number of additional trials were given with shock administered every time an S responded with one of the 5 first-trial punished responses. They were then asked to chain-associate to each of the stimulus words with no shock administered. At the conclusion of the experiment Ss could be classified into insight and non-insight groups on the basis of their levels of verbal awareness as to the reasons for the shocks and what they had done to avoid them. Both groups showed a rapid and marked learning of avoidance behavior and a significant decrement in the number of punished responses occurring during chained associations.—*A. S. Tamkin.*

2581. Farese, Francis John. The differential effects of distributed practice in compound trial-and-error learning. *Dissertation Abstr.*, 1957, 17, 1131-1132.—Abstract.

2582. Fincher, Cameron Lane. An investigation of associative and nonassociative factors in verbal performance. *Dissertation Abstr.*, 1957, 17, 1132.—Abstract.

2583. Firsov, L. A. O vzaimootnosheniakh pishchevoi i igrovoi uslovnoreflektornoj deiatel'nosti u detenysha shimpanze. (On the interrelations of alimentary and play conditioned-reflex activity in the baby chimpanzee.) *Zh. vyssh. nervn. Deiatel'*, 1955, 5, 844-854.—In the case of simultaneous extinction of two different kinds of conditioned reflexes (alimentary and play) there arises an "exceedingly intense inhibitory afteraction, during which time the baby chimpanzee falls into a hysteroid state." In the case of simultaneous extinction of two conditioned reflexes of the same kind, extinction proceeds in a manner similar to that of one conditioned reflex.—*I. D. London.*

2584. Gasto, A., IUs, A., Morrel, F., Storm Van Leeuwen, V., Bekkering, D., Kamp, A., & Verre, ZH. Elektroentsefalograficheskaia kharakteristika obrazovaniia uslovykh refleksov u cheloveka. (Electroencephalographic characteristics of the formation of conditioned reflexes in man.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 25-38.—Five protocols, portraying the electroencephalographic characteristics of conditioned-reflex formation in man are examined in detail.—*I. D. London.*

2585. Goodrich, K. P., Ross, L. E., & Wagner, A. R. Performance in eyelid conditioning follow-

ing interpolated presentations of the UCS. *J. exp. Psychol.*, 1957, 53, 214-217.—A control group received 60 pairings of CS and UCS. The experimental group received only the UCS during trials 21-40. On the last 20 trials the E group significantly superior to the C group. "... results are interpreted as supporting the Hullian view that habit strength develops gradually during the experimental session as a function of CS-UCS pairings, and as failing to support a formulation which states that eyelid conditioning curves reflect primarily the growth of a motivational factor under the control of the UCS."—*J. Arbit.*

2586. Hartman, Bryce O. The effect of target frequency on pursuit tracking. *USA med. Res. Lab. Rep.*, 1957, No. 263. ii, 14 p.—8 subjects tracked one-dimensional simple sine waves ranging in frequency from 10 to 60 cycles per minute, using a springless joystick. Each increase in frequency led to poorer performance, both in time-on-target and hits scores. The change in performance was systematic, with no marked inflection points. Changes in target frequency had a greater effect on hits scores than on time-on-target scores. Analysis of single cycles suggested systematic changes in performance for different portions of the cycle.—*R. V. Hamilton.*

2587. Hill, William Paul. An experimental comparison of place learning, response learning, and discrimination learning. *Dissertation Abstr.*, 1957, 17, 1133-1134.—Abstract.

2588. House, B. J., Orlando, R., & Zeaman, D. Role of positive and negative cues in the discrimination learning of mental defectives. *Percept. Mot. Skills*, 1957, 7, 73-79.—This experiment was designed to determine the relative importance of positive and negative cues in visual discrimination learning in mentally defective children. Each of 18 Ss learned 12 problems of 3 different types (with cues constant, negative cues variable, or positive cues variable) in a triple classification factorial design: Ss \times conditions \times repetitions. Performance under the constant condition was consistently better than that under the variable positive condition. The variable negative condition began at the same low level as the variable positive but improved over repetitions to the level of the constant condition. Two interpretations of the results were offered.—*C. H. Ammons.*

2589. Hurley, John R. Achievement imagery and motivational instructions as determinants of verbal learning. *J. Pers.*, 1957, 25, 274-282.—... the major findings were that verbal learning performance is positively related to achievement imagery and negatively related to hostility scores under the low motivating instruction; also a differential influence of the two types of instructions on performance was noted. In addition, some evidence was found that expectations of successful and unsuccessful outcomes of competition with standards of excellence have distinctive behavioral correlates.—*M. O. Wilson.*

2590. Ito, Masami. (The relation between success-failure and completed-incompleted tasks. Effects of success and failure upon the recall of completed and uncompleted tasks.) *Jap. J. Psychol.*, 1957, 27, 259-269.—The variables of stress (competition) vs. non-stress (cooperation), completion-incompletion, and success-failure were studied in their interrelationships, testing two school children at a time. Significant results were: greater recall of "suc-

cess" tasks in a stress situation; greater recall of "failure" tasks in a non-stress situation when completion was associated with success; difference between completion-success and completion-failure groups in recall of incomplete tasks in a stress situation and of completed tasks in a non-stress situation. It is concluded that ego defensive reactions play a large part but only in situations of stress, since neither goal nor tension seems to be specific to one task. English abstract, p. 317-318.—J. Lyons.

2591. Iwahara, Shinkuro. (Studies of the "spread of effect": III. The fore-gradient and number-guessing habits.) *Jap. J. Psychol.*, 1956, 27, 227-234.—Two phenomena occurring in "spread of effect" studies—that the fore-gradient is weaker than the after-gradient, and that repetition is increased in a learning over a nonlearning situation—are explained, in terms of Zirkle's "guessing" hypothesis, by emphasizing the significance of the interruption of S's guessing sequence by the presentation of a reward. English abstract, p. 257-258.—J. Lyons.

2592. Karen, Robert L. Recognition as a function of meaningfulness and intention to learn. *Amer. J. Psychol.*, 1956, 69, 650-652.—During a single learning trial, 2 groups of 15 S's each, age-range 17-50 years, were required to locate 15 nonsense syllables and 15 common words. One group was also instructed to learn the items for a later test. A recognition test followed 1½ min. later. The intentional learning group recognized significantly more words but no more syllables than the incidental learning group.—R. H. Waters.

2593. Karolchuck, Patricia A., & Worell, Leonard. Achievement motivation and learning. *J. abnorm. soc. Psychol.*, 1956, 53, 255-257.—The hypothesis was offered that Ss with high n Achievement would learn more in directed and incidental learning situations than those with low n Achievement. Using extreme groups on a n Achievement continuum, the 12 highest and 14 lowest high school freshmen, it was found that the expected superiority of high n Achievement Ss in a directed learning situation did not obtain, although they did demonstrate more efficient incidental learning.—A. S. Tamkin.

2594. Katz, Sanford. Stimulus aftereffects and the partial-reinforcement extinction effect. *J. exp. Psychol.*, 1957, 53, 167-172.—Using 2 distinctly different straight alleys measured the resistance to extinction of various combinations of partial and continuous reinforcement in the two alleys. Concluded that stimulus aftereffects are of less importance than other factors (intratrial factors).—J. Arbit.

2595. Kawai, Iroku. (An analysis of behavioral factors operating through the processes of acquisition and extinction. Factorial studies of the learning process. I.) *Jap. J. Psychol.*, 1957, 27, 279-284.—Using 25 rats in a Skinner box, data from subperiods of acquisition and extinction were correlated, and from the resulting matrix the following four factors extracted: (1) "relevant reaction potential"; (2) "reaction potential" due to hunger-drive; (3) "cognitive"; and (4) "emotional adaptability." The same factors appeared when data from two other studies were analyzed in similar fashion. 20 references. English abstract, p. 319-320.—J. Lyons.

2596. Kelleher, R. T. A comparison of conditioned and food reinforcement on a fixed-ratio

schedule in chimpanzees. *Psychol. Newsltr.*, N. Y. U., 1957, 8, 88-93.—"The patterns of responding of 2 chimpanzees on a fixed-ratio schedule were compared under conditions of reinforcement by food or by poker chips (conditioned reinforcers) that could later be exchanged for food. The results showed that reinforcement by food supported lower rates of responding than poker chips in the early sessions. In subsequent sessions, the food became far more effective than the poker chips."—M. S. Mayzner.

2597. Khananashvili, M. M. K voprosu ob uchastii tormoznogo protsessa v differentsirovani polozhitel'nykh uslovykh razdrashitelei. (On the participation of the inhibitory process in the differentiation of positive conditioned stimuli.) *Zh. vyssh. nervn. Deiatel'.*, 1956, 6, 433-437.—This study aims to define the role of the inhibitory process in the differentiation of positive conditioned stimuli. Differentiation of conditioned auditory stimuli was elaborated, based on "contrasting the negative (nonreinforced) conditioned stimulus to the positive (reinforced) stimulus," thus leading to development of the inhibitory process in response to the non-reinforced stimulus. It was found that "differentiation of positive conditioned reflexes reinforced by unconditioned stimuli of the same kind (food stimuli) considerably facilitates the subsequent differentiation elaborated by contrasting the negative conditioned stimulus to the positive stimulus. This is accounted for by the permanent training of the inhibitory process arising as negative induction while differentiating positive conditioned stimuli."—I. D. London.

2598. Kisliakov, V. A. Izmenenie uslovykh statokineticheskikh refleksov posle enukleatsii u delabirintirovannykh sobak. (Changes in conditioned statokinetic reflexes following [eye] enucleation in delabyrinthed dogs.) *Zh. vyssh. nervn. Deiatel'.*, 1956, 6, 438-442.—The role of visual reception in forming conditioned statokinetic reflexes was studied in delabyrinthed dogs. Conditioned reflexes to cutaneous stimulation were elaborated on the basis of motor reactions caused by rotating the animals. The previously elaborated statokinetic conditioned reflexes remained after eye enucleation, and new ones could be formed. It is concluded that the preservation of previously elaborated conditioned statokinetic reflexes and the formation of new ones in dogs deprived of vestibular, auditory, and visual receptors are due to the remaining analysers, chiefly the motor and cutaneous analyzers.—I. D. London.

2599. Korotkin, I. I., & Suslova, M. M. Izmenenie uslovykh i bezuslovykh refleksov posle vnusheniia vo vtoroi faze gipnoza. (Change in conditioned and unconditioned reflexes after suggestion in the second phase in hypnosis.) *Zh. vyssh. nervn. Deiatel'.*, 1956, 6, 370-377.—The degree of modification of conditioned and unconditioned reflex activity, resulting from suggestion of stimuli in the second hypnotic phase, is less than that in the somnambulistic phase. Conditioned reflexes are more affected than unconditioned reflexes, when suggestion is directed to the latter. Repetition of such suggestions intensifies the effect of the suggested stimuli. Effects are greater in the first signal system than in the second.—I. D. London.

2600. Koyanagi, Kyôji. (Studies in incidental learning: I. Intention of learning and isolation ef-

fect.) *Jap. J. Psychol.*, 1957, 27, 270-278.—Perceptual isolation based on the added factor of a difference in color of the stimulus did not favor recall under either intentional or incidental learning conditions; nor did the added color difference either aid or hinder the isolation effect. The author concludes, in agreement with Postman and Phillips, that "isolation favors retention only to the extent that the stimulus features producing isolation are relevant to the learner's task." 19 abstracts. English abstract, p. 318-319.—*J. Lyons.*

2601. Kudriavtseva, N. N. K kharakteristike predela tormoznogo protsesssa. (On an index of the limit to the inhibitory process.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 426-432.—In a study, aimed at determining the limit to the inhibitory process as loudness of an inhibitory stimulus is gradually increased, it was found that an inhibitory stimulus of intensity 50-100 decibels leads to instances of differentiation-disinhibition, positive induction phenomena, and a general increase in magnitude of conditioned reflexes. Disinhibition rapidly disappears. Use of intensities exceeding 100 decibels, however, is characterized by changes in the course of the inhibitory process and the whole of higher nervous activity. This is manifested in rather stable differentiation-disinhibition and a changed general level of conditioned-reflex activity. Positive and inhibitory conditioned-reflex magnitudes fluctuate greatly, and phase states and "summation-explosiveness" are observable. Stable differentiation-disinhibition, accompanied by summation-explosiveness and phase phenomena, as well as a decrease in all positive conditioned reflexes, may be taken as indices of attainment of the limit to the inhibitory process.—*I. D. London.*

2602. Kupalov, P. S. O mekhanizme vozniknoveniia vnutrennego tormozheniia. (On the mechanism of the arising of internal inhibition.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 3-12.—Anokhin is taken to task for his anti-Pavlovian incomprehensibilities relevant to the problem of internal inhibition. Pavlovian conceptions should, of course, be discarded if shown to be obsolete, but this he has not succeeded in showing.—*I. D. London.*

2603. Lapina, I. A. Vzaimootnoshenie pishchevykh i kislotnykh refleksov, razlichaiushchikhsia po mestu bezuslovnogo podkrepleniia. (Relationship between alimentary and acid reflexes, which differ with regard to site of unconditioned reinforcement.) *Fiziol. Zh. SSSR*, 1956, 42, 838-843.—Utilizing dogs with surgically exposed symmetrical parts of the tongue, it was found that reflexes, conditioned to either food or acid, do not inhibit each other when the conditioned reflexes are established through stimulation of different receptive surfaces (in the case of reflex to food, the oral cavity; in the case of reflex to acid, the opposite sides of the tongue).—*I. D. London.*

2604. Lekishvili, V. P. O serdechnom komponente uslovnogo pishchevogo refleksa. (On the cardiac component of the conditioned alimentary reflex.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 822-829.—A simultaneous study was made of the salivary and cardiac components of conditioned reflexes in dogs before, during, and after the mutual reversal of the signal meaning of an associated pair of inhibitory and positive conditioned alimentary stimuli. "Inhibitory conditioned alimentary stimuli (differentiation

stimuli)" produce a regular reduction in heart rate. In normal dogs the "law of power relations" may be quite pronounced in the cardiac component of conditioned alimentary reflexes even in cases when such relation is not observed in the salivary component of the same reflexes. Reversal of the associated pair of opposite conditioned reflexes takes place in a different way for different components. Dissociation between separate components of a conditioned reflex can be observed during reversal of the associated pair of opposite conditioned alimentary reflexes.—*I. D. London.*

2605. Lewis, Donald J., & Duncan, Carl P. The effect of partial reinforcement and length of acquisition-series upon resistance to extinction of a motor and a verbal response. *Amer. J. Psychol.*, 1956, 69, 644-646.—In a kind of poker game, 180 S's guessed whether the four cards they dealt themselves was a winner. If they guessed correctly they were given a nickel, the reward was given on a randomized basis to give 50% reinforcement to some S's, 100% was given to others. After 4, 8, or 16 hands no further reward was given and the S's were allowed to play "as long as they wanted." This was the extinction series in which the motor response, continuing the play, was extinguished the more quickly the longer the training series, % reinforcement was ineffective. The verbal response "win" was extinguished more slowly under 100% reinforcement but unaffected by length of training series. Differences between these and the more usual findings on partial reinforcement are pointed out.—*R. H. Waters.*

2606. Lilly, John C. Learning elicited by electric stimulation of subcortical regions in the unanesthetized monkey. *Science*, 1957, 125, 748-749.—Abstract.

2607. Lur'e, R. N., Rabinovich, M. IA., & Trofimov, L. G. Issledovanie elektricheskikh iavlenii v korkovykh kontsakh analizatorov sobaki pri vyrabotke oboronitel'nykh uslovnnykh refleksov. (Study of electrical phenomena in the terminal cortical regions of the analyzers in the dog during the elaboration of conditioned defensive reflexes.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 863-871.—Electrical phenomena in the cortical regions of the motor, auditory, and optic analyzers were studied during the elaboration of conditioned defensive reflexes to sound. "The development of cortical inhibition, irrespective of the conditions of its appearance (differentiation, extinction, retardation, successive inhibition) is expressed electrographically in a uniform way and depends only on depth of the process. The least deep degree of inhibition appears on the EEG as periods of lowered activity, alternating with volleys of frequent oscillations. The deepest degree of cortical inhibition manifests itself in the form of diminished amplitudes in all forms of oscillations." These may be either generalized in all parts of the cortex or "prominent in one of the areas involved in the formation of the conditioned reflex."—*I. D. London.*

2608. Mann, Kenneth Walker. Personality correlates of recognition and recall of faces. *Dissertation Abstr.*, 1957, 17, 1388-1389.—Abstract.

2609. Moiseeva, N. A. Obrazovanie intero- i eksterotseptivnykh uslovnnykh refleksov v razlichnye stadii ontogeneza. (Formation of intero- and exteroceptive conditioned reflexes at various onto-

genetic stages.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 394-398.—Data are adduced which show that in the early postnatal periods of puppies interoceptive "signalization" has a more essential biological significance for the organism than exteroceptive "signalization" (e.g., auditory). With growth the significance of the latter becomes predominant.—*I. D. London.*

2610. **Monaenkov, A. M.** Vliianie dlitel'nogo razdrzheniia vzukom elektricheskogo zvonka na uslovnorefleksionnuiu deiatel'nost' zhivotnykh. (Influence of prolonged stimulation by sound of an electric bell on conditioned-reflex activity in animals.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 891-897.—For 6 days white rats, in whom conditioned reflexes had been previously elaborated, were daily subjected to sounds of electric bells of different pitch and intensities. The first 2 days the animals were subjected to this stimulation for 45-90 minutes, and in the following days, for 2 hours uninterruptedly. By the 7th day the behavior of the rats, their conditioned activity, autonomic functions, and appearance had radically changed. They became less mobile, often refused to eat, were untidy, and sometimes aggressive. One may speak of this as a breakdown of higher nervous activity.—*I. D. London.*

2611. **Muenzinger, Karl F.** On the origin and early use of the term vicarious trial and error (VTE). *Psychol. Bull.*, 1956, 53, 493-494.—Several of the generalizations made by Goss and Wischner (see 31: 2422), in their review of the studies concerned with vicarious trial and error, are evaluated. The author confines his statements to the early research on "VTE."—*W. J. Meyer.*

2612. **Murphy, J. V., & Miller, R. E.** The manipulation of dominance in monkeys with conditioned fear. *J. abnorm. soc. Psychol.*, 1956, 53, 244-248.—"2 group dominance tests were conducted on 10 rhesus monkeys. On the basis of these tests 5 pairs of animals adjacent, or nearly adjacent, in the hierarchy were given an additional 5 dominance determinations. The animal in each pair which received the greater number of raisins in each of the 7 tests between the 2 animals was designated as dominant. This animal in each pair was subjected to avoidance conditioning with this submissive partner as the conditioned stimulus. . . . The dominance status was found to be significantly reversed following the completion of conditioning. It was suggested that this observation provides behavioral evidence for the presence of fear in avoidance conditioning which is independent of the conditioning situation."—*A. S. Tamkin.*

2613. **Myers, Jerome L.** The effects of delay of reinforcement upon an operant discrimination in the pigeon. *Dissertation Abstr.*, 1957, 17, 904.—Abstract.

2614. **Nefzger, M. D.** The properties of stimuli associated with shock reduction. *J. exp. Psychol.*, 1957, 53, 184-188.—Tested "the hypothesis that stimuli acquire reinforcement value through association with shock termination. Stimuli like those of a shock-escape compartment were present during testing in one T-maze arm; these stimuli could not have elicited responses at the time of choice." In an additional study "the critical stimuli could have elicited responses at the T-maze choice point. There was no evidence that stimuli paired with shock offset either

reinforce or elicit responses in simple-choice learning."—*J. Arbit.*

2615. **Neumann, Eva, & Ammons, R. B.** Acquisition and long-term retention of a simple serial perceptual-motor skill. *J. exp. Psychol.*, 1957, 53, 159-161.—Studied the acquisition and retention characteristics of a task in which S learned a circular sequence of eight randomly paired toggle switches. Retention was a function of the time since learning. Found a serial-position effect similar to that found with serial verbal learning which was not due to the verbalization used by S: the nature of the series appeared to be the crucial variable.—*J. Arbit.*

2616. **Obraztsova, G. A.** Obrazovanie uslovykh reflektov s kozhnogo analizatora u sobaki i krolika v ontogeneze. (Formation of conditioned reflexes from the dermal analyzer in dogs and rabbits in ontogenesis.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 837-845.—Conditioned reflexes to tactile stimulation appear in puppies beginning the 3rd week of postnatal development. At first the conditioned reaction is of a general motor nature, but by the 5th-6th week a "specialized shake-off reflex" appears. In rabbits the general motor reflex forms during the 2nd week with the conditioned shake-off reaction observable shortly thereafter. Differentiation of dermal stimulations, applied to symmetrical regions of the fore and hind extremities in puppies, is rapidly obtained and is stable. The time and rate of elaborating conditioned motor reactions in the examined species do not depend on the number of previous stimulations. They reflect the "morphophysiological maturity of the higher parts of the central nervous system corresponding to a certain period of ontogenesis."—*I. D. London.*

2617. **Okada, IA.** Sostoianie izucheniia uslovykh reflektov v Iaponii. (The state of study of conditioned reflexes in Japan.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 351-352.—There is in Japan great interest in study of the conditioned reflex. However, "lack of understanding and prejudice, Virchowism, insufficiency of literature, etc.," have created difficulties in pursuing this line of research. The conviction is expressed that "with a correct Weltanschauung" and "in the course of studying the problems of higher nervous activity," the "idealism and dualism, which now obstruct Japanese medicine" will be overcome.—*I. D. London.*

2618. **Okano, Tsuneya.** (An experimental study of Spence's theory of transposition of discrimination learning: Studies of Transposition II.) *Jap. J. Psychol.*, 1957, 27, 285-295.—In accordance with Spence's theory, both infants and rats when trained to the smaller of two stimuli showed few relative responses. However, other results not in accord with Spence's theory were: when the Ss were trained to the larger stimuli, many relative responses occurred; infants showed an increase of absolute responses and rats an increase of position responses when relative responses fell off, a distinction between species which the theory cannot account for. 27 references. English abstract, p. 320-321.—*J. Lyons.*

2619. **Ol'nianskaia, R. P., & Isaakian, L. A.** Refleksornye izmeneniia gazovogo obmena v sviazi s tipologicheskimi osobennostiami nervnoi sistemy. (Reflex changes in gas exchange in connection with typological properties of the nervous system.)

Zh. vyssh. nervn. Deiatel', 1956, 6, 408-414.—It is shown that conditioning, involving gas exchange constancy during rest, forms very rapidly in dogs with strong balanced type of nervous system. In orientation reactions metabolic shifts in gas exchange are not very great, and their extinction occurs as a result of applying a small number of indifferent stimuli. A variable level of basic metabolism, with considerable fluctuations from day to day, was observed in dogs with strong, but unbalanced type of nervous system, characterized by a predominance of the excitatory processes. Conditioning, involving exchange constancy, in this case is formed with difficulty. As regards orientation reactions, a reaction of increased gas exchange of considerable scope occurs, as a rule, requiring a large number of experiments for its extinction. Conditioning, involving exchange constancy, is retarded in dogs with a predominance of the inhibitory processes. In dogs of the weaker type (strong variation) metabolic changes in orientation reactions are very great and their extinction proceeds unevenly and takes a long time.—I. D. London.

2620. Panchenkova, E. F. Issledovanie uslovnykh refleksov u morskikh svinok v ontogeneze. (Study of conditioned reflexes in guinea pigs in ontogenesis.) Zh. vyssh. nervn. Deiatel', 1955, 5, 873-880.—Differences in the development of conditioned reflexes and the course of their extinction between newborn and adult guinea pigs are discussed. Differentiation of acoustic stimuli in newborn and growing guinea pigs are developed with great difficulty and often are only relative. Extinction of conditioned reflexes in guinea pigs proceeds relatively slowly. The older the animal, the quicker it takes place. Photoc conditioned reflexes extinguish more rapidly than acoustic.—I. D. London.

2621. Prazdnikova, N. V. Pishchevye dvigatel'nye uslovnye refleksy na tsepi razdrzhitel' u ryb. (Alimentary motor conditioned reflexes to a chain of stimuli in fish.) Zh. vyssh. nervn. Deiatel', 1955, 5, 901-911.—It is possible to form conditioned reflexes in the golden carp to a chain of stimuli consisting of 3 components. Speed of formation is identical with that of a conditioned reflex to a single stimulus. The development of "inhibitory reactions to a chain stimulus" depends on the structure of the differentiated chain and is more difficult than the development of differentiation to a single stimulus. In the fish it was possible to develop a stable differentiation (within the limits of 150-200 presentations of the unreinforced chain) only to a chain of stimuli with components in reverse order. It was possible to develop a very unstable differentiation to a chain of stimuli with a substituted middle component. Nonpresentation of a chain of stimuli for periods of up to 1½ months does "not disrupt the positive reflex to it, but does disrupt differentiation." It is concluded that single components of a chain of stimuli lose their "signal significance," so that the chain is perceived as a single stimulus.—I. D. London.

2622. Razran, Gregory. The dominance-contiguity theory of the acquisition of classical conditioning. Psychol. Bull., 1957, 54, 1-46.—The purpose of this article is to present a formulation of the "dominance-contiguity" theory of the acquisition of classical conditioning in the light of a new treatment of old research and the large amount of new research

relevant to the theory. One of the conclusions drawn was "that contiguity is a necessary but not a sufficient condition for classical CR acquisition and that drive reduction is neither necessary nor sufficient for it." 668 item bibliography.—W. J. Meyer.

2623. Rothkopf, Ernst Z. A deduction from an excitation-inhibition account of retroactive inhibition. J. exp. Psychol., 1957, 53, 207-213.—Ss practiced two paired-associate lists of 6 items each and were tested with all 12 pairs immediately and 21 hr. after practice with the second list. Concluded "that retroactive inhibition depends to an important degree on the inhibition of overt or covert original list responses during practice with the interpolated list. The 21-hr. recall data suggest that these inhibitory effects decay in time. The general results of this experiment confirm the value of an excitation-inhibition account of paired-associate learning."—J. Arbit.

2624. Rushkevich, E. A. O reche-dvigatel'noi metodike so slovesnoi i pribavochnym razdrzhitel'm. (On the speech-motor method with verbal instruction and supplementary stimulus.) Zh. vyssh. nervn. Deiatel', 1956, 6, 913-918.—A new variant of the "speech-motor method" is described which combines preliminary verbal instruction with a supplementary stimulus. Utilization of this method allows one to investigate the regulatory role of the second signal system with respect to the first signal system. Differences in this role are discerned between the normal and the psychotic.—I. D. London.

2625. Sarason, Irwin G. The effect of anxiety and two kinds of failure on serial learning. J. Pers., 1957, 25, 383-392.—The purpose of the experiment was to determine the effects of failure and of different degrees of anxiety on learning. One high and one low anxious group were failed on a preliminary nonsense learning task similar to one on which they would be subsequently tested. One high and one low anxious group were failed on a digit cancellation test, one quite dissimilar to the post-failure task. Controls were also used. The high anxious groups were adversely affected by failure, the two kinds of failure being equally effective. The low anxious group failed on digit cancellation was superior to all other experimental groups, but low anxious Ss failed on the preliminary list did not differ from the low anxious control group. 17 references.—M. O. Wilson.

2626. Schaefer, Vernon Herbert. Avoidance conditioning in the absence of external stimulation: Some experimental and genetic parameters. Dissertation Abstr., 1957, 17, 1395-1396.—Abstract.

2627. Shustina, N. A. Metodika odnovernennogo issledovaniia dvigatel'nykh sledovykh i slivnykh sledovykh uslovnykh refleksov. (A method for the simultaneous study of motor trace and salivary trace conditioned reflexes.) Zh. vyssh. nervn. Deiatel', 1956, 6, 338-341.—A method is described which permits the simultaneous study of motor and salivary trace conditioned reflexes. Delayed motor reactions, far from being a "special phenomenon," is "in reality nothing other than motor trace conditioned reflexes [exhibiting] the characteristic two phases"—inhibition, followed by excitation.—I. D. London.

2628. Slamecka, Norman J. Dimensions of similarity. Dissertation Abstr., 1957, 17, 1130.—Abstract.

2629. Smith, R. P., Wagman, A. I., Wagman, W., Pfeiffer, C. C., & Riopelle, A. J. Effects of some tranquilizing and depressant drugs on conditioned avoidance behavior in monkeys. *J. Pharmacol.*, 1957, 119, 317-323.—Using the same monkeys and procedure as in a previous study of the effects of reserpine on conditioned avoidance in brain operated and control animals, the effects of additional tranquilizing and depressant drugs were assayed. "Reserpine, desmethoxyreserpine, rescinnamine, and chlorpromazine all produced performance deficit without loss of motor coordination." Azacyclonol had no effect on conditioned avoidance behavior, while the deficit produced by pentobarbital was attributed to ataxia. Desmethoxyreserpine had more rapid onset than reserpine and rescinnamine and was significantly less effective in animals with lesions of the frontal cortex.—G. A. Heise.

2630. Soldatenkov, P. F., & Ganiushkina, S. M. Usloyni refleks na krovoobrashchenie, dykhanie i gazoobmen u krupnogo rogatogo skota. (Conditioned reflex [involving] circulation, respiration, and gas-exchange in cattle of the taguil breed.) *Fiziol. Zh. SSSR*, 1956, 42, 893-897.—Conditioning involving the circulatory and respiratory action of intramuscular injections of a 1% solution of adrenalin, serving as unconditioned stimulus, was established in 3 young cows, where the sound of a bell was used as conditioned stimulus. After 7-14 combinations, conditioned circulatory and respiratory effects could be obtained when the sound of the bell was followed by an injection of saline solution. Positive conditioned reflexes to sounding of the bell without any reinforcement appeared somewhat later. The conditioned reflex proved stable, being displayed after 19-20 unreinforced conditioned stimulations, though the intensity of the reaction declined progressively.—I. D. London.

2631. Sshastnyi, A. I. O vosstanovlenii korovykh vremennykh svyazei, nakhodiaschchikhsia v latentnom sostoianii. (On the restoration of cortical conditioned connections which are in latent state.) *Fiziol. Zh. SSSR*, 1956, 42, 844-848.—Experimental data are adduced to show that "old" conditioned connections which are in latency, continuously interact with new connections, are transformed, and only under certain conditions may be revealed in one or another form and with varying degrees of intensity. It is concluded that "conditioned reactions which have been developed in ontogenesis are not annulled with the formation of new forms of conditioned connections, but go into the latent state."—I. D. London.

2632. Strauss, Marvin E. Need-achievement and instructions in relation to learning and reminiscence. *Dissertation Abstr.*, 1957, 17, 1136.—Abstract.

2633. Strebel, Ralph Frederick, Jr. A study of adrenal cortical activity and performance on a straight runway in rats subjected to starvation. *Dissertation Abstr.*, 1957, 17, 1396.—Abstract.

2634. Struchkov, M. L. Generalizatsiia perekliucheniia raznorodnykh uslovykh refleksov. (Generalization of the switching of heterogeneous conditioned reflexes.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 282-285.—If heterogeneous (alimentary and defensive) conditioned reflexes are elaborated in dogs

under certain conditions and then, with the surroundings changed, a switch in signals is elaborated, that is, to food is imparted a defensive signal meaning and vice-versa, generalization of conditioned-reflex activity proceeds in accordance with the new surroundings. In the previous surroundings all stimuli close to the food agent call forth at once an alimentary reaction, while in the subsequent surroundings the same stimuli call forth a defensive reaction. A similar switch occurs in the case of the originally defensive signal.—I. D. London.

2635. Struchkov, M. I. K kharakteristike uslovnoreflektornogo perekliuchatelia. (On the characteristics of the conditioned-reflex switch.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 277-281.—This study aims to ascertain the change in surroundings necessary to alter the "signal meaning of stimuli to be switched over" and the duration of the change required to bring about the alteration. The experiments were performed in one chamber. A 25 wt bulb flashing up to 20 times a minute, when added to the general illumination, did not produce any switching. Addition of a 150 wt bulb likewise had no effect. However, replacement of a 150 wt bulb by a 200 wt bulb with simultaneous noise of a table-type fan made it possible to elaborate switching. If an experiment starts under usual conditions and subsequently the switch-over stimuli (bulb-motor) are suddenly added, the latter must act at least a minute to bring about the change in the signal meaning of the stimuli. To restore their former signal meaning after cessation of the switching action likewise takes 1-2 minutes.—I. D. London.

2636. Sukemune, Seisoh. (Experiments on extinction and spontaneous recovery in white rats through the "response-alternation" method.) *Jap. J. Psychol.*, 1956, 27, 111-118.—2 experiments, designed to examine whether extinction can be explained as the "changed direction of a psychological resultant" in a field of forces, required rats to learn one path to food and then substitute another path. The continuous-reinforcement group and the group with the more effortful response showed the lesser resistance to extinction. It is concluded that this can be viewed as a changed psychological direction. English abstract, p. 173-174.—J. Lyons.

2637. Tallarico, Robert Batchelder. Effect of punishment on human operant behavior. *Dissertation Abstr.*, 1957, 17, 906.—Abstract.

2638. Tsuge, KH., Ii, A., Khanaia, IU., & Okhiai, KH. Issledovanie uslovykh refleksov u nizshikh pozvonochnykh (zolataia rybka i krasnyi tal—pagrosomus major). (Study of conditioned reflexes in lower vertebrates (goldfish and sea-bream—pagrosomus major).) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 461-468.—Using light as conditioned stimulus with alimentary reinforcement and measuring intensity of conditioned reaction by speed of swimming up to the light, it was found that conditioned reactions may be established after a relatively small number of repetitions both in goldfish and pagrosomus major, but that, especially in the former, the number of repetitions required varies considerably. The conditioned reaction once established persists for a surprisingly long period of time in both fish. In goldfish a positive alimentary conditioned reflex can be altered to a negative one by applying the light without reinforce-

ment. It takes quite a long time for a stable conditioned reflex to be completely extinguished when a fish is left alone. In *pagrosomus major* the ability to differentiate between green and red light can be developed relatively quickly. However, a conditioned reaction which has been differentiated is very difficult to reverse, if not impossible.—*I. D. London.*

2639. Van Riche, Charles, Jr. Generalization of an instrumental response to circular areas with control of visual frame-of-reference. *Dissertation Abstr.*, 1957, 17, 904-905.—Abstract.

2640. Vatsuro, E. G. Sekretornyi i dvigatel'nyi komponenty uslovnogo pishchevogo refleksa kak indikatory nekotorykh kortikal'nykh protsessov. (Secretory and motor components of the conditioned alimentary reflex as indices of several cortical processes.) *Zh. vyssh. nervn. Deiatel'*, 1957, 7, 83-91.—2 important facts were established with respect to the reported studies of "simultaneous complex stimuli, consisting of components of different physiological strengths and relating to various analyzers": (1) "absence of any visible effect with isolated utilization of a weak component of a simultaneous complex, formed of indifferent agents"; (2) "maintenance, by the weak component of the complex, of its conditioned character, 'if before formation of the complex its constituent components possessed signal significance' [that is, were previously conditioned stimuli].—*I. D. London.*

2641. Voznaia, A. I. O prirode vzaimodeistviia komponentov odnovernennogo kompleksnogo uslovnogo razdrzhitelia. (On the nature of the interaction of components of a simultaneous complex conditioned stimulus.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 269-276.—After development of conditioned reflexes to single stimuli, exciting the same analyzers as the simultaneous set of components of a complex stimulus, the weak components by themselves, exhibited a weak conditioned effect, while the magnitude of the complex stimulus remained unchanged. Complex conditioned stimuli, formed by substitution of single components of the complex (weak or strong) by single conditioned stimuli, exciting the same analyzer, exhibit greater conditioned effect than the original complex. Substitution of a strong component by a single conditioned stimulus of equal or lesser magnitude produces a greater conditioned effect than substitution of a weak component by a single conditioned stimulus of equal or greater magnitude.—*I. D. London.*

2642. Wulff, J. Jepson, & Stolurow, Lawrence M. The role of class-descriptive cues in paired-associates learning. *J. exp. Psychol.*, 1957, 53, 199-206.—Hypothesized that when the stimulus objects in a list of objects have class-descriptive features, these features may give rise to implicit responses which become a part of the associative stimulus event. Compared the rate of paired associates learning under two conditions of training: one favoring the formation of compound stimulus events, the other not favoring this formation. The former condition resulted in a reliably higher level of performance with a given amount of training.—*J. Arbit.*

2643. Wywrocki, Eugene Hugh. Age differences in retroactive inhibition as a function of the degree of similarity of serial position between the

original and interpolated learning. *Dissertation Abstr.*, 1957, 17, 1136-1137.—Abstract.

(See also Abstracts 2338, 2364, 2401, 2403, 2469, 2838, 2970, 3050)

THINKING & IMAGINATION

2644. Floyd, Lois Gray. Eidetic imagery in normal and psychotic cases: A study in the incidence and characteristics of eidetic imagery in normal and psychotic cases, and a comparative analysis of the groups. *Dissertation Abstr.*, 1957, 17, 903.—Abstract.

2645. Freud, Sigmund, & Oppenheim, D. E. Dreams in folklore. New York: International Universities Press, 1958. 111 p. \$3.00.—Contains the German text of "Träume im Folklore" together with an English translation of this recently discovered manuscript which was written in 1911. Freud's letter to Oppenheim concerning their collaboration is also reproduced.—*A. J. Sprov.*

2646. Goldberger, Emanuel. Simple method of producing dreamlike visual images in the waking state: A preliminary report. *Psychosom. Med.*, 1957, 19, 127-133.—The S is requested to visualize a specific verbal thought. The successive visual images obtained can then be related to the same verbal thought. Case illustrations are given along with indications for the usefulness of this approach in psychosomatic disturbances and their treatment.—*L. A. Pennington.*

2647. Katz, George Gershon. An investigation of eidetic imagery in conditions of hypocalcemia, with and without latent tetany. *Dissertation Abstr.*, 1957, 17, 889.—Abstract.

2648. Keats, John Augustus. Formal and concrete thought processes. *Dissertation Abstr.*, 1957, 17, 1382.—Abstract.

2649. Lee, James Andrew. Change in flexibility and inventiveness of thinking as a function of diagnostic-therapeutic approach. *Dissertation Abstr.*, 1957, 17, 1127.—Abstract.

2650. Lewin, Bertram. Dreams and the uses of regression. New York: International Universities Press, 1958. 64 p. \$2.00.—The well known three dreams in a single night of Descartes, during his personal and intellectual crisis, appear as efforts to control the sleep-disturbing effects of bodily stimuli through externalizing them as dream images. Descartes' subsequent conceptual separation of the thinking mind from material nature as the foundation of science simply represents the useful waking parallel to the relation of the body ego to dream material in a successful sleep-protecting dream.—*E. W. Eng.*

2651. Mayzner, M. S. Bibliography on cognitive processes: XII. Problem-solving. *Psychol. News-ltr, N. Y. U.*, 1957, 8, 77-82.—156 references.

2652. Pinard, W. J. Spontaneous imagery: Its nature, therapeutic value, and effect on personality structure. *Boston Univ. Grad J.*, 1957, 5, 150-153.—Since 1948 the author has been conducting experiments in spontaneous imagery. Analysis of 2,844 protocols of 334 individuals indicate that the practice of spontaneous imagery has a cathartic effect, bringing about a "temporary transmutation of personality and a more lasting reorientation in the sense

of values and the frame of reference of the observer."
—O. Strunk, Jr.

2653. Stephens, Mark Wheeler. **Wishfulness and accuracy in expectancy-stating.** *Dissertation Abstr.*, 1957, 17, 1130-1131.—Abstract.

(See also Abstracts 2678, 2716, 2798, 2939, 2945, 3023, 3173)

INTELLIGENCE

2654. Brown, Moroni H., & Bryan, G. Elizabeth. **The Altitude Quotient as a measurement of intellectual potential.** *J. clin. Psychol.*, 1957, 13, 137-140.—To determine the distribution of differences between IQ and Altitude Scores on the W-B, Altitude Quotients (AQ) were computed for 270 cases. AQ was defined as the prorated IQ corresponding to the average weighted score of the two highest of the 11 W-B subtests. S's were divided into 18 subgroups; there were three age groups each with three IQ categories consisting of 15 males and 15 females randomly selected from a non-clinic pool. Sex was found to be unrelated to AQ-IQ differences. These differences were very significantly larger for the 10-15-year-olds than for both the 16-19 and the 20-29-year-olds; differences between the latter were not significant. The differences for the high IQ (above 110) groups were at least significantly smaller than those for either the low (below 91) or the average IQ groups. These data are related to the restrictive range of the W-B. The r between AQ and IQ was .87. The mean difference between AQ and IQ was 24.6 IQ points with an SD of 8.1.—L. B. Heathers.

2655. Guilford, J. P. **The structure of intellect.** *Psychol. Bull.*, 1956, 53, 267-293.—Productive thinking is an aspect of intelligence which has been generally overlooked in most theoretical conceptualizations of human intelligence. A listing of approximately 40 intellectual factors culled from the research literature are presented. Of these numerous factors, the vast majority have to do with thinking and the remainder are memory factors. These factors are categorized according to a scheme suggested by the author. The "implications of the factors and their system were pointed out for factor theory and practice, for general psychological theory, and for the concept of intelligence and practices of intelligence testing." 31 references.—W. J. Meyer.

2656. Libert, L., & Pasquasy, R. **L'influence des facteurs sociaux sur les résultats d'un test d'intelligence.** (The influence of social factors on an intelligence test.) *Cah. Pédag.*, 1956, 13, 147-170.—L. M. Terman's test was given to 250 boys and 250 girls, 12 years old. Statistical study showed that two factors exercise a more or less strong influence on intellectual level: sex and social environment. Boys are generally superior to girls, especially in the verbal tests. Middle-class children are superior to those of the working class.—R. Piret.

2657. Ombredane, A. **Étude du comportement intellectuel des noirs congolais.** (A study of intellectual behavior in Congo Negroes.) *Psychol. franç.*, 1957, 1(2), 19.—A brief account is provided of the development of norms of performance on the Colored Matrices test for Negro inhabitants of the Congo (Asalampasu group). The data indicate that there is a significant increase in mean scores for given age

groups between educated and non-educated groups.—B. A. Maher.

2658. Rogers, Cyril A. **Measuring intelligence in New Zealand.** *Auckland Univer. Coll. Monogr. Ser.*, 1956, No. 2. 127 p.—A report of a re-standardization of Thurstone's Primary Mental Abilities Test for ages 11 to 17 years on a New Zealand population. A discussion of the test, sampling procedures, norms and applications is presented as is a possible rapprochement between the Burt and Thurstone theories of intelligence.—J. Arbit.

(See also Abstracts 2669, 2905)

PERSONALITY

2659. Beier, Helen, & Hanfmann, Eugenia. **Emotional attitudes of former Soviet citizens, as studied by the technique of projective questions.** *J. abnorm. soc. Psychol.*, 1956, 53, 143-153.—The Russian Ss included 39 men and 9 women who were selected for a clinical study from a much larger number of former Soviet citizens interviewed in Munich in 1950-51 by the Harvard Project on the Soviet Social System. The American Ss were paired with the Russian group in terms of age, sex, education, and occupation. The projective questions used in the California studies of authoritarianism were administered and the responses coded according to content. "The findings are discussed in terms of the emotional and evaluative attitudes prevalent in each group, and their implications for the theory of authoritarian personality are pointed out."—A. S. Tamkin.

2660. Berkowitz, Leonard, & Lundy, Richard M. **Personality characteristics related to susceptibility to influence by peers or authority figures.** *J. Pers.*, 1957, 25, 306-316.—"The present results indicate that individuals whose opinions tend to be successfully influenced by peers may differ in certain personality characteristics from individuals more successfully influenced by generals (military). Thus, it has been noted that individuals low on the present measure of interpersonal confidence, in general, tend to be more readily influenced by their peers than by the authority figures. . . . The present results also indicate that the Ss more readily influenced by the generals than the peers tend to exhibit two types of patterns: (a) high F scale and high interpersonal confidence scores, or (b) low complexity and high interpersonal confidence."—M. O. Wilson.

2661. Biesheuvel, S., & Pitt, D. R. **Some tests of speed and tempo of behaviour as predictors of the primary-secondary function temperament variable.** *J. nat. Inst. person. Res., Johannesburg*, 1956, 6, 87-94.—51 subjects were given 11 tests designed to measure speed and tempo and were also asked to rate each other. Further study involving factor analysis will be necessary before decisions concerning relationships can be made. Hypotheses for such studies have been set up. 21 references.—J. L. Walker.

2662. Bucklew, John. **Complex behavioral units of the reactional biography.** *Psychol. Rec.*, 1956, 6, 44-48.—Some facts of personality and social psychology are examined to see what theoretical concepts best fit them. The behaviors are characterized as diverse, involving multiple S-R units and extending in time. Based on the characteristics and interbehavioral assumptions the traditional S-R formulation

is rejected and ego-role type concepts are rejected. Interbehavioral concepts such as behavior segment, reactional biography and other larger but "naturalistic" units are suggested.—S. C. Ratner.

2663. Dalmau, Carlos J. Post-oedipal psychodynamics. *Psychoanal. Rev.*, 1957, 44, 1-9.—Emotional growth is achieved through regressive defenses occurring cyclically. Each defense occurs at a different plane of performance but is directly related to pre-oedipal instinctual roots. Passive libidinal strivings when frustrated trigger off aggressive sadistic drives. Passive genital strivings at the oedipal level give rise to genital sadistic drives against the parent of the opposite sex, forcing anal regression in the boy and a clitoridal shift in the girl. Frustration of masculine strivings in the girl and feminine drives in the boy evokes another sadistic phase that forces an oral and narcissistic regression in prepuberty.—D. Prager.

2664. Deskins, Andrew Jackson. Magical thinking, superstition and authoritarian trends in personality. *Dissertation Abstr.*, 1957, 17, 1123.—Abstract.

2665. Drake, David. On pet names. *Amer. Imago*, 1957, 14, 41-43.—The pet name involves less of the total self than does the first name but allows more libidinal intensity. Three examples are given of pet names that couples have for each other which reveal clues to the nature of their relationship.—W. A. Varvel.

2666. Eysenck, H. J. Drugs and personality: I. Theory and methodology. *J. ment. Sci.*, 1957, 103, 119-131.—Postulate: "Depressant drugs increase cortical inhibition, decrease cortical excitation and thereby produce extraverted behavior patterns. Stimulant drugs decrease cortical inhibition, increase cortical excitation and thereby produce introverted behavior patterns." So stimulant drugs should reduce hysterical patterns of behavior and depressant drugs should increase them. On objective psychological tests the effects of depressant drugs should be similar to the effects of brain damage. The research methodology is reviewed in the light of behavior theory. 22 references.—W. L. Wilkins.

2667. Gottschalk, Louis A., Gleser, Goldine C., & Hambidge, Gove, Jr. Verbal behavior analysis: Some content and form variables in speech relevant to personality adjustment. *A.M.A. Arch. Neurol. Psychiat.*, 1957, 77, 300-311.—Verbal behavior by 11 psychiatric inpatients and 11 volunteer "normal" control Ss and aroused either by "verbal induction" (instructions to talk for 5 minutes) or by "visual induction" (develop stories to 4 TAT cards) indicated upon statistical analysis the operation of 5 variables that differentiated the 2 groups (verbal method of induction). These included differences in use of first person plural pronouns, "self" words, verbs, words referring to inanimate objects, and qualifying words. Results from the analysis of verbal behavior under the "visual induction method" differed considerably from that induced verbally. These and other findings are discussed in relation to adjustment levels and personality dynamics.—L. A. Pennington.

2668. Grauer, David. Some misconceptions of Federn's ego psychology. *J. Amer. psychoanal. Ass.*, 1957, 5, 282-292.—"An endeavor is made to clear up some misconceptions of Federn's ego psychology in the light of recent criticism by Jacobson

and by Hartmann, Kris, and Loewenstein. Federn's concepts of ego libido, ego boundaries, and narcissism are discussed. Hartmann's use of the terms "self-cathexis" and "narcissistic ego cathexis" is critically examined. A clarification is attempted to Federn's conception of the process of ego breakdown."—D. Prager.

2669. Jones, Ernest. De la nature du génie. (The nature of genius.) *Rev. franç. Psychanal.*, 1957, 21, 64-82.—The common uses of the word "genius" are reviewed, the definitions of it by various known figures, its distinctions from talent, its spontaneous creativity, the element of surprise involved in it. The weaknesses of men of genius are cited, as Freud's credulity, his inability to estimate character in persons near him. Genius possesses love of truth, the ability to perceive truth in the absolute and the universal, the capacity for concentration. Jones contributes as a characteristic of genius a particular scepticism as an essential condition of production. Credulity correlates in genius with receptivity.—G. Rubin-Rabson.

2670. Katkovsky, Walter. An exploratory study of risk-taking. *Dissertation Abstr.*, 1957, 17, 1125-1126.—Abstract.

2671. Kaywin, Louis. Note on the concept of self-representation. *J. Amer. psychoanal. Ass.*, 1957, 5, 293-301.—It is advisable to consider the concepts of the positive and negative self-representations as integral nuclei in the developing ego system. "Maintaining the repression of the primitive negative self-representations, but also the integrating of them into the later definitive and more realistic concept of the self is one of the most important functions of the system ego."—D. Prager.

2672. Krathwohl, David R., & Cronbach, Lee J. Suggestions regarding a possible measure of personality: The squares test. *Educ. psychol. Measmt.*, 1956, 16, 305-316.—Research on objective tests of personality is difficult to compare because of unintentional variation of testing technique. This paper illustrates some of the factors requiring standardization by discussing the variants of one such test, the Squares Test, which have appeared. Possible scoring methods for the Squares Test and correlates of these scores are also discussed. 15 references.—W. Coleman.

2673. Leavitt, Harry C. Relation between conditioned patterns and superego development. *Psychoanal. Rev.*, 1957, 44, 73-80.—Superego development involves conditioning as well as psychodynamic factors. The child is conditioned to react with inferiority if he fails in normal and ethical competition. A certain form of guilt reaction is considered as objective guilt and denotes the conscience proper as a manifestation of preconscious function. In contrast to the superego the ego ideal is chiefly oriented to seeking social approval and hence is capable of relatively facile cultural modifications in conformity with the aging process of the adult.—D. Prager.

2674. Lumeij, J. L. J. The methods of psychology and psychiatry: A methodological analysis of various ways of approach with special reference to H. J. Eysenck's personality studies. Assen, Netherlands: Van Gorcum, 1957. 243 p. \$6.00. (New York: Gregory Lounz.)—The author examines and interprets Eysenck's theory of personality with a view to unifying the thinking and strengthening the posi-

tion of psychiatry. Some of the points of conflict in medicine and psychiatry to be resolved are: (1) opposition between causal explanation and meaningful and teleological understanding; (2) atomistic vs. wholistic approach; (3) opposition between analytical and synthetic approach; and (4) the problem of quantitative and qualitative differences. Bibliography.—*M. O. Wilson.*

2675. **Lynd, Helen Merrell.** *On shame and the search for identity.* New York: Harcourt, Brace, 1958. 318 p. \$5.75.—In the treatment of personality, researchers and writers have overlooked the importance of the concept shame. If identity is to be dealt with adequately a consideration of shame must be included, since the isolating, alienating and incommunicative effects of shame bring identity into such clear focus. The present book attempts to give this concept a more adequate treatment than it has heretofore received. The first chapter deals with the derivations and usages of shame and guilt. The second gives a detailed description of the experiences of shame. The third examines some of the assumptions that underlie prevailing methods of study in psychology and social science which lead to the neglect of such pervasive experiences as shame and its absorption into guilt in contemporary treatments of personality. The fourth examines newer methods coming into use which may throw light on the experiences of shame and the sense of guilt. The final chapter explores the implications and points the meaning of preceding discussions for development of a sense of identity. Extended reference list.—*M. O. Wilson.*

2676. **McGehee, Thomas P.** *The stability of the self-concept and self-esteem.* *Dissertation Abstr.*, 1957, 17, 1403-1404.—Abstract.

2677. **Mundy-Castle, A. C.** *The relationship between primary-secondary function and the alpha rhythm of the electroencephalogram.* *J. nat. Inst. person. Res., Johannesburg*, 1956, 6, 95-102.—The results of 12 tests of speed and psychic tempo taken by 40 subjects, who were also given an electroencephalogram, are compared with the subject's alpha rhythm. "... a significant correlation is found between ratings of the temperament variable Secondary Function and frequency of the alpha rhythm in the EEG. Subjects rated as secondary functioning possess lower alpha frequencies than subjects rated as primary functioning." 47 references.—*J. L. Walker.*

2678. **Myden, Walter David.** *An interpretation and evaluation of certain personality characteristics involved in creative production: An investigation and evaluation of personality structure and characteristics of creative individuals in the context of psychoanalytic theory and ego psychology.* *Dissertation Abstr.*, 1957, 17, 897-898.—Abstract.

2679. **Ohashi, Masao.** (Studies of choice behavior and interpersonal perception: II. Perception of the other person's attitude toward the third person.) *Jap. J. Psychol.*, 1956, 27, 193-203.—The hypothesis (derived from Heider's formulations) was tested that a person p's perception of a second person q's attitude toward a third person o tends to be in harmony or strike a balance with p's attitudes toward q and o. Although the hypothesis was supported in general, the two attitudes were found to contribute differentially. A factor of "assumed similarity" as proposed by Fiedler may also be required to explain

the results. 22 references. English abstract, p. 253-254.—*J. Lyons.*

2680. **Olinick, Stanley L.** *Questioning and pain, truth and negation.* *J. Amer. psychoanal. Ass.*, 1957, 5, 302-324.—A question denotes an attempt by the questioner to master and shape reality in a situation wherein passivity and anxiety threaten. The effective question knows its answer; the effective questioner knows the answer he seeks. A question may operate as a form of negation of reality. The association of the question with pain, truth, and negation has been demonstrated as part of a regular sequence in individual human experience. A well-developed ego may employ a question in a valid and realistic endeavor. 38 references.—*D. Prager.*

2681. **Parnell, R. W.** *The Rees-Eysenck body index of individual somatotypes.* *J. ment. Sci.*, 1957, 103, 209-213.—Chest width, included in the index, gives faulty results for some types. Measures of fat and muscle should be added to correlation matrices from which factors will be derived in future research.—*W. L. Wilkins.*

2682. **Payne, Sylvia.** *Notes sur quelques types de défense du moi.* (Several types of ego defense.) *Rev. franç. Psychanal.*, 1957, 21, 83-92.—Several types of ego defense having their origins in pre-genital phases of libidinal development are reviewed.—*G. Rubin-Rabson.*

2683. **Pear, T. H.** *Personality, appearance and speech.* London, Allen & Unwin, 1957. 167 p. 15s.—In this book Professor Pear attempts to fill in some of the external details of personality, emphasizing appearance and speech, aspects inadequately dealt with in other treatments of personality. Since judgments of personality are constantly being made in terms of fashions of facial appearance, hair styles, cosmetics, moustaches, beards, spectacles, ear-rings, as people are observed on TV and films and in other settings, appearance and speech deserve a more thorough consideration in research on personality. Several investigations on the nature of personality are reviewed and a few comments concerning the personalities of F. D. Roosevelt, Gladstone, R. A. Butler and Prime Minister Macmillan are thrown in. The nature and function of intellectuals now having an opportunity to influence appearance and speech are examined. 178 references.—*M. O. Wilson.*

2684. **Smith, Donald E. P.** *Interdisciplinary approach to the genesis of anxiety.* *Educ. Theory*, 1956, 6, 222-231.—This paper seeks to find agreement among a variety of theorists such as Freud, Rank, Sullivan, Mowrer, Angyal, Goldstein, Lewin, Rogers, and Kierkegaard. Despite differing terminology there appears to be consensus that a "basic drive" and a "structuring force" are necessary for organismic development and that anxiety results from a lack of balance, or state of disequilibrium, between these factors. "Normal" and "neurotic" anxiety are distinguished and explained. A "perceptual" conception of neurotic forgetting is developed as an alternative to the doctrine of "repression." Implications for psychotherapy and education are considered. 26 references.—*A. E. Kuenzli.*

2685. **Steiner, Ivan D.** *Self-perception and goal-setting behavior.* *J. Pers.*, 1957, 25, 344-355.—Techniques for measuring two commonly neglected dimensions of self-perception are described, one yield-

ing a measure of uncertainty, the other an index of pessimism. The findings indicate the value of continued research linking indexes of self-perception with measures of goal-setting behavior.—*M. O. Wilson.*

2686. Thass-Thienemann, Theodore. **Oedipus and the sphinx: The linguistic approach to unconscious fantasies.** *Psychoanal. Rev.*, 1957, 44, 10-33.—The hidden and guarded secret of the sphinx is the unknown of the sexual riddle. Oedipus defeats the sphinx through insight and knowledge. The sphinx kills herself when her secret is broken at sexual maturation. The later fate of Oedipus personifies the final defeat of conscious thinking and the victory of the sphinx or psychic forces hidden in the unknown and unconscious of one's own self. 22 references.—*D. Prager.*

2687. Tillich, Paul. **Faith and the integration of the personality.** *Pastoral Psychol.*, 1957, 8(72), 11-14.—This is part of a chapter from *Dynamics of faith*. N. Y.: Harper, 1957.—Faith "is the state of being ultimately concerned." It "determines and unites all elements of the personal life." While idolatric faith elevates one element to ultimacy, real faith has healing power for the total personality.—*A. Eglash.*

2688. Titus, H. Edwin, & Hollander, E. P. **The California F scale in psychological research: 1950-1955.** *Psychol. Bull.*, 1957, 54, 47-64.—The purpose of this paper is to present a review of those studies using the F scale in substantially its original form which appeared in the literature between 1950 and 1955. The studies were grouped into five major categories: (a) ideology; (b) personality correlates; (c) interpersonal behavior; (d) cultural and sub-cultural variations; and (e) studies of the instrument. It was concluded that "many questions still remain to be answered before its (the F scale) use would have much meaning in terms of predicting human behavior." 64-item bibliography.—*W. J. Meyer.*

2689. Tournier, Paul. **The meaning of persons.** New York: Harper, 1957. 234 p. \$3.75.—This Swiss psychiatrist's reminiscences about struggles, in self and patients, to discover the person behind the personage is both Freudian and Christian. In true dialogue between persons, a second parallel dialogue with God also occurs. Only this dialogue reveals the authentic person.—*A. Eglash.*

2690. Weiss, Edoardo. **The phenomenon of "ego passage."** *J. Amer. psychoanal. Ass.*, 1957, 5, 267-281.—Ego passage or the passing of an object through the ego occurs in two steps: (1) An object representation is internalized by the ego, thus becoming an ego trait or ego state. (2) This ego trait is then externalized, becoming again an object representation. The re-externalized representations are not identical with the original ones. The ego passage of object representations can be repeated several times and each time the representations involved undergo changes. The process of externalization turns ego states into object representations regardless of whether or not a corresponding object is actually found in the external world. In the process of ego passage various modifications concerning the objects and the goals of drives may occur. Among these, sublimation of the drive and idealization of the object are the most important ones.—*D. Prager.*

2691. Winthrop, Henry. **The consistency of attitude patterns as a function of body type.** *J. Pers.*, 1957, 25, 372-383.—"The consistency of a S's attitudes . . . was found to be related to somatotype to a significant degree. In particular, relatively low value integrity . . . is found for individuals with a high endomorphic component and relatively high value integrity for individuals with a high ectomorphic component. These polar components seem to be related to highly extraverted and introverted tendencies. For individuals who are purely mesomorphic the measure of value integrity achievable seems to lie midway between that of the pure endomorph and the pure ectomorph, suggesting that this component is a balancing factor between two possible extremes of attitude consistency."—*M. O. Wilson.*

(See also Abstracts 2608, 2652, 2770, 2810, 2898, 2903, 2933, 3014, 3098, 3275, 3294, 3298, 3300)

AESTHETICS

2692. Campbell, R. **Du fantastique.** (Concerning fantastic tales.) *Ann.-médec. psychol.*, 1956, 1(5), 788-804.—The fantastic tale has always attracted widespread interest and has a solid place in literature. Its peculiar appeal, according to the author, lies in its unique position in the irrational "neutral zone of no mind's land," the very ground which brought forth universal myths, and their rich elaboration. These tales differ from the popular detective, or psychopathological stories. In the latter, a logical explanation to strange happenings is always forthcoming, while in the latter, the reader is confronted by an inaccessible, anxiety-rousing "presence" which fascinates him all the more that it transcends his everyday, logical experience.—*M. D. Stein.*

2693. Holstijn, A. J. Westerman. **The psychological development of Vincent Van Gogh.** *J. ment. Sci.*, 1957, 103, 1-17.—Study of the life and of the work suggests a parallelism between psychological and artistic evolution. Early signs pointed to schizoid involvement, but diagnosis is irrelevant, and theories of temporal or psychomotor epilepsy cannot account for all the facts. The artist's warm love of others is not typical of schizoid tendencies.—*W. L. Wilkins.*

2694. Morris, Charles. **Significance, significance, and painting.** In Ray Lepley (Ed.), *The language of value*. New York: Columbia University Press, 1957. Pp. 58-76.—120 college men were asked for P (preference) and A (appraisal) ratings of 20 or more works of art presented as colored reproductions. Endomorphs tended to show higher correlations of P and A ratings; this correlation was also higher for men expressing interest in painting. It is concluded that "appraisive signs do not signify objects in isolation from person or persons in isolation from objects, but objects in their capacity to satisfy needs."—*J. B. Carroll.*

2695. Niederland, William G. **The symbolic river-sister equation in poetry and folklore.** *J. Hillside Hosp.*, 1957, 6, 91-99.—Incestuous sibling love expressed in river symbolism is illustrated by both ancient and modern literary sources.—*C. T. Bever.*

2696. Smith, Gordon Ross. **A note on Shakespeare's Sonnet 143.** *Amer. Imago*, 1957, 14, 33-36.—Sonnet 143 is intelligible as an artistic expression

of the relationship of the oedipus complex to mature, heterosexual love.—*W. A. Varvel.*

2697. **Soleh, Arye.** *Hayesodot hapsikhologiyim-hahevratyim bitsirot Dostoyevski.* (The social-psychological basis in Dostoyevsky's writings.) *Ofakim*, 1956, 10, 295-300.—Dostoyevsky revealed the sick and complicated soul, but he was unable to understand the typical man and to describe him, as well as to suggest a proper way to improve the reality. He was "a pioneer of those authors who described the capitalistic, modern city," although Petrograd of his time was far away from London or Paris.—*H. Ormian.*

2698. **Wolf, E.** *Arthur Rimbaud fut-il schizophrène?* (Was Arthur Rimbaud schizophrenic?) *Ann. méd.-psychol.*, 1956, 2(3) 429-444.—Several studies of Arthur Rimbaud's work and life have advanced the possibility of his suffering from a schizophrenic disorder. The author questions these findings (singling out the study of Dr. Fréret as the most important) and points out that, although Rimbaud appears to have had a particularly stormy adolescence, he deliberately cultivated his "delusional" experiences, never lost control of his environment and was able to give up completely his literary activities when he felt it endangered his health.—*M. D. Stein.*

2699. **Wulf, Moshe.** *Leheker hapsikhologia shel haitsuv hoomanuti.* (Studying the psychology of artistic shaping.) *Ofakim*, 1956, 10, 309-352.—"There are people who deal with creation from aesthetic, technical, historical . . . psychological, sociological, philosophical, etc., point of view. . . . But one subject-matter remained unsolved: The secret of artistic shaping itself, the processes occurring in the artist's mind." The aim is to explain these processes. The discussed items are: Identification, activity of imagination, creative phantasy, artistic ways of expression, causes of creative activity. The explanation is psychoanalytical.—*H. Ormian.*

2700. **Zeligs, Dorothy F.** *A psychoanalytic note on the function of the Bible.* *Amer. Imago*, 1957, 14, 57-60.—The Old Testament is "an expression of the Hebraic approach to . . . the nuclear psychological conflict of each human being—the oedipal struggle" through which the Hebrews "slowly evolved a form of sublimation, a religion and morality which found expression in their principles of ethical monotheism and in their social and cultural standards for group living." The development of the superego is portrayed as a group drama, with its leaders as the representative actors.—*W. A. Varvel.*

2701. **Zeligs, Dorothy F.** *Saul, the tragic king.* *Part I.* *Amer. Imago*, 1957, 14, 61-85.—Developmental picture is presented of Saul's history and his patterns of behavior prior to the time David became the figure around which the king's emotional conflict centered. Originally submissive and dependent, Saul became more self-assertive and more rebellious against Samuel. His desperate efforts to appease the Father were paralleled by a growing antagonism to Jonathan. By sacrificing Jonathan he could satisfy both his aggression and his guilt. As his ambivalent relationship with Samuel gave way, he became severely depressed.—*W. A. Varvel.*

2702. **Zohar, Zvi.** *Dostoyevski be'eyney avi hapsikhoanaliza.* (Dostoyevsky as seen by the father of psychoanalysis.) *Ofakim*, 1956, 10, 290-294.—The

intellectual atmosphere in Central Europe at the beginning of the 20th century is briefly described, especially the interest in Dostoyevsky's writings because of psychological problems involved in them. Freud's rather negative relation to Dostoyevsky's personality is explained, and his essay "Dostoyevski und die Vätertötung" is analyzed.—*H. Ormian.*

2703. **Zuk, Gerald H.** *A note on Richard's anxiety dream.* *Amer. Imago*, 1957, 14, 37-39.—Richard III represents an "archetype of the individual who suddenly experiences a powerful wish—fulfillment, who undergoes severe ego stress as a result . . . and whose ego may be threatened with total dissolution in trying to bring under control previously repressed superego forces." Richard is not a leader, but rather one who would destroy authority and leadership.—*W. A. Varvel.*

(See also Abstracts 2742, 2972)

DEVELOPMENTAL PSYCHOLOGY

2704. **Ames, Robert.** *Physical maturing among boys as related to adult social behavior: A longitudinal study.* *Calif. J. educ. Res.*, 1957, 8, 69-75.—A followup study of 40 men, averaging approximately 33 years of age, from an original group of 200 adolescent boys studied between 1932 and 1938, showed physical maturation rate (roentgenographically determined skeletal ages during the 14th and 17th years, divided by chronological ages, and averaged) to be significantly related to occupational status, informal social participation, formal social participation, total social participation, the supervision of subordinates in occupations, and possibly to officership in organizations. "At the 1% level, none of the ratings of social behavior during adolescence could be considered to be significantly related to any of the measures of (adult) social behavior."—*T. E. Newland.*

(See also Abstract 2553)

CHILDHOOD & ADOLESCENCE

2705. **Abbott, Thomas B.** *A study of observable mother-child relationships in stuttering and non-stuttering groups.* *Dissertation Abstr.*, 1957, 17, 1148-1149.—Abstract.

2706. **Adrian, Robert John.** *The relationship of parental personality structures to child adjustment and adoption selection.* *Dissertation Abstr.*, 1957, 17, 1386.—Abstract.

2707. **Bernson, Marthe.** *Du gribouillis au dessin.* (From scribbling to drawing.) Neuchâtel, Switzerland: Delachaux et Niestle, 1957. 86 p. S.Fr. 5.—Scribbles of even very young children soon change to meaningful drawings. Personality can be traced in them and predictions based on them. Drawing should be encouraged for deftness, release and significance of material.—Drawings of several children are analyzed and compared.—*G. Rubin-Rabson.*

2708. **Cintrón de Crespo, Patria.** *La evaluación del desarrollo emocional.* (The evaluation of emotional development.) *Pedagogia*, 1956, 4(2), 63-85.—Criteria to be followed and the most used techniques for evaluating emotional development are discussed.—*E. Sánchez-Hidalgo.*

2709. **Dintzer, Lucien.** *Le jeu d'adolescence.* (Adolescent play.) Paris: Presses Universitaires de

France, 1956. 123 p. 300 Fr.—An outline of the behavior of adolescents, their contradictions, their seeming instability and unpredictability. The peculiar escapades of students, the distortions in their language may be a sign of revolt against conventions, against adults, and the need to grow up. Their endless discussions, the changing aims and plans bear witness to delayed maturity, a kind of eternal adolescence in life like that in the literature. The uncertainty of many adolescents, their scorn of the world around them, their thoughtlessness may be a remnant of childhood's play attitude and a clinging to the golden age of irresponsibility. Adolescence is a human trait, with puberty the point of departure and the beginning of real maturing. The child plays, the adolescent plays with adolescence, as if unwilling to leave behind the freedom of childhood.—*M. M. Gillet*.

2710. Ferguson, Marian Nelson. A comparison of the chain associations of nursery school and kindergarten children to action-picture stimuli. *Speech. Monogr.*, 1957, 24, 56-64.—60 children, from 3 to 6 years old, were given an association test, with action-pictures as stimuli. Significant differences between the younger and older children in total responses, noun constructions, and use of adjectives and prepositions were found. Action-pictures were found to produce a larger sampling of verbal behavior than still-pictures.—*D. Lebo*.

2711. Ford, Nick Aaron. Literature as an aid to social development. *Teach. Coll. Rec.*, 1957, 58, 377-381.—Changes can be made through the study of literature in attitudes, social concepts, ideals, standards and narrowness-broadness of ideas. Goals suggested for the social development of children through literary studies include: satisfactory family membership, loyalty to worthy ideals, evaluation of individuals on the basis of personal merit rather than stereotyped conceptions, willingness to substitute sympathetic understanding of human actions for blind judgment, recognition of world brotherhood.—*H. K. Moore*.

2712. Gofman, Helen; Buckman, Wilma, & Schade, George H. Parents' emotional response to child's hospitalization. *A.M.A. J. Dis. Child.*, 1957, 93, 629-637.—Parents as well as children need to be prepared for separation. Parents desire to know why a child should be hospitalized and what treatment is to be done, and what to expect as regards visiting hours, etc. Hospital staff can help by expressing concern for child's emotional needs.—*G. K. Morlan*.

2713. Goldstein, Naomi Slutzky. The effect of animated cartoons on hostility in children. *Dissertation Abstr.*, 1957, 17, 1125.—Abstract.

2714. Gratiot-Alphandéry, H. Education et formation culturelle de l'enfant en milieu rural. (The education and cultural training of the child in a rural environment.) *Psychol. franç.*, 1957, 1(2), 22-23.—Data are summarized from a large-scale descriptive study of children drawn from two rural areas of France. The general tenor of these data indicates that rural environments serve to depress the intellectual and cultural achievements and aspirations of the child, this development being especially marked after the age of 12 years.—*B. A. Maher*.

2715. Hamlin, Richard E. The relationship of certain adolescent developmental tasks to Hi-Y

membership. *Dissertation Abstr.*, 1957, 17, 807-808.—Abstract.

2716. Inhelder, Bärbel, & Piaget, Jean. The growth of logical thinking from childhood to adolescence: An essay on the construction of formal operational structures. New York: Basic Books, 1958. xxvi, 356, p. \$6.75.—Translation of "De la logique de l'enfant à la logique de l'adolescent: essai sur la construction des structures opératoires formelles," (see 29: 7000).

2717. Kagan, Jerome. The child's perception of the parent. *J. abnorm. soc. Psychol.*, 1956, 53, 257-258.—Interviews were held with 217 children of both sexes whose ages ranged from 6-0 to 10-2. Their answers to questions related to their perception of their parents were obtained. Both girls and boys stated that fathers were less friendly and more dominant, punitive, and threatening than mothers. There was, however, a consistent tendency for the older children to be more likely than the younger children to view the parent of the same sex as more dominant and punitive. It was suggested that differential handling of boys and girls might partially account for this latter finding.—*A. S. Tamkin*.

2718. Kvaraceus, William C., & Dolphin, Jane E. Selected references from the literature on exceptional children. *Elem. Sch. J.*, 1957, 57, 391-401.—150-item bibliography.

2719. Lakin, Martin. Personality factors in mothers of excessively crying (colicky) infants. *Monogr. Soc. Res. Child Developm.*, 1957, 22(1), (Ser. 64). i, 48 p.—Subjects were 20 mothers of colicky infants (experimental group) and 20 controls, mothers of normal, well-adjusted infants. Dimensions of personality such as role acceptance, felt adequacy, and motherliness were explored by means of a questionnaire, a Q sample of relevant attitudes, and 3 unstructured tasks. The experimental group differed from the controls with respect to the 5 dimensions studied. Feelings associated with these dimensions appear to affect the quality of the mother-infant interaction. The evidence suggests that infantile colic may be associated in part with the relative potency and direction of such feelings. 30 references.—*E. L. Robinson*.

2720. Lebovici, Serge. Die psychoanalytischen Auffassungen über die affektive Entwicklung des Kindes und ihre Integration in neurobiologische und kulturelle Gegebenheiten. (Psychoanalytic views on the affective development of the child and their integration into neuro-biological and cultural facts.) *Prax. Kinderpsychol. Kinderpsychiat.*, 1957, 6, 33-38.—The following points are discussed: (1) A historical resumé of the well-known findings basic to the affective life of the child; (2) methodological considerations which have made it possible to arrive at these findings; (3) a comparison of the psychoanalytic and neurological findings on the affective life of the child, at least insofar as there is agreement between them; and (4) significance of cultural mores for the affective development of the child.—*E. Schaverin*.

2721. Levine, Madeline S. The later period of childhood. *Understanding the Child*, 1957, 26, 99-101.—To understand the development of the child during the later period of childhood several important areas must be considered: (1) physical growth and

physiological changes; (2) the influence of peer cultures; (3) family determinants; and (4) the child's school experiences.—*W. Coleman.*

2722. Medinnus, Gene Roland. An investigation of Piaget's concept of the development of moral judgment in six- to twelve-year-old children from the lower socio-economic group. *Dissertation Abstr.*, 1957, 17, 1382-1383.—Abstract.

2723. Mednick, Sarnoff, A., & Lehtinen, Laura E. Stimulus generalization as a function of age in children. *J. exp. Psychol.*, 1957, 53, 180-183.—Found fairly regular decreasing gradients of frequency of response for all ages. Stimulus generalization reactivity of the younger children (7, 8, 9 yr.) was significantly greater than for the older children (10, 11, 12 yr.). The younger children show regular increasing gradients of latency, while the latency gradients of the older children are irregular.—*J. Arbit.*

2724. Meili-Dworetzki, Gertrud. Das Bild des Menschen in der Vorstellung und Darstellung des Kleinkindes. (The mirror of man in the perception and performance of the small child.) *Beih. Schweiz. Z. Psychol. Anwend.*, 1957, No. 30, 5-136.—This is a detailed study of the productions of 130 children, aged 3 to 7; the development of the human form; and perception of self and of others over time. Children's verbal descriptions are compared to their drawing productions. The beginnings of artistic attempts are discussed in terms of varied dimensions. 50 references.—*H. P. David.*

2725. Mueller, Wilbert J. A study of adolescent adjustment using Shaffer's postulates as a model. *Dissertation Abstr.*, 1957, 17, 783-784.—Abstract.

2726. Nass, Martin L. The effects of three variables on children's concepts of physical causality. *J. abnorm. soc. Psychol.*, 1956, 53, 191-196.—"This study investigated the effects of 3 variables on children's concepts of physical causality. It was found that: (1) The nature of the causal thinking of withdrawn children is at a significantly less mature level than the causal thinking of normal children. (2) Questions about phenomena whose causal agents are not accessible to direct experience yielded significantly more nonnaturalistic responses than did questions about phenomena whose causal agents are more accessible. (3) Questions worded so as to suggest the possible operation of 'animistic,' 'supernatural,' or 'dynamic' forces yielded more such nonnaturalistic types of responses than questions less suggestively worded."—*A. S. Tamkin.*

2727. Núñez de Bunker, Celia. El adolescente en la familia. (The adolescent in the family.) *Pedagogía*, 1956, 4(2), 23-32.—The following topics are discussed: psychological weaning, vocational guidance, heterosexual relations outside the home, acceptance of the adolescent as a person, family problems, and adult behavior.—*E. Sánchez-Hidalgo.*

2728. Peters, James Sedalia, II. Socio-economic egocentrism in delinquents and non-delinquents. *Stud. higher Educ., Purdue Univ.*, 1957, No. 85, 1-21.—The results of testing delinquent and non-delinquent adolescent groups with Semantic Differential Scales and a modified SRA Youth Inventory indicate that a definite relationship exists between the way an individual feels about himself and the way he feels about others. Delinquents, as compared with

non-delinquents, hold negative feelings toward themselves and others.—*R. M. Frumkin.*

2729. Potter, Howard W., & Klein, Henriette R. On nursing behavior. *Psychiatry*, 1957, 20, 39-46.—25 mothers were observed on the obstetrical service of the University Division of the Kings County, Brooklyn Hospital where breast-feeding is mandatory. In a follow-up of 16 mothers after 9 months, behavior during two nursing periods and other evidences of maternal interest were scored. The failure of nursing to stimulate interest in reluctant mothers, trends in the socioeconomic group seen in private practice, the dearth of information on animal lactation, and attitudes leading toward maternal gratification in nursing are discussed.—*C. T. Bever.*

2730. Sánchez-Hidalgo, Efraín. La psicología de la crianza: VIII. Las actitudes de protección excesiva. (The psychology of rearing: VII. Attitudes of overprotection.) *Rev. Asoc. Maestros*, P. R., 1956, 15(2), 64-66.—Different attitudes revealing overprotection on the part of parents in their relations with their children are discussed. Emphasis is laid on the existence of these attitudes in the Puerto Rican culture and on the effects they may have in the development of the Puerto Rican personality.—*E. Sánchez-Hidalgo.*

2731. Schwarz, Berthold Eric, & Ruggieri, Bartholomew A. Parent-child tensions. Philadelphia: Lippincott, 1958. xv, 238 p. \$4.95.—Written in a nontechnical style, a pediatrician and a psychiatrist outline phases and problems in child growth and rearing, the parents' influence on each phase dictated by their own emotional problems, specific causes for delinquency, psychosomatic involvements, confused sexuality, death of parent and divorce, adoption. Points are illustrated by case histories.—*G. Rubin-Rabson.*

2732. Senn, Milton J. E. Fads and facts as the bases of child-care practices. *Children*, 1957, 4, 43-47.—The author reviews child-development research and child-care trends that indicate competition between facts and fads in child-care practices: (a) starting a trend; (b) influences on research; (c) some findings of current research; (d) caution in predicting behavior; and (e) child-care practices.—*S. M. Amatora.*

2733. Wallon, H., et al. L'importance du mouvement dans le développement psychologique de l'enfant. (The importance of movement in the psychological development of the child.) *Psychol. franç.*, 1957, 1(2), 24-30.—This is a series of brief abstracts of papers presented at a colloquium on the title topic. Contributors were Wallon, Tournay, Piaget, de Ajuriaguerra, Koupnik, Bergeron, Stambak and Perron. The discussion is organized around the concept of stages in motor development.—*B. A. Maher.*

2734. Westley, William A., & Elkin, Frederick. The protective environment and adolescent socialization. *Soc. Forces*, 1957, 35, 243-249.—The view of adolescence as a period of tension for the middle-class child is not supported by data derived from a study of adolescents in an upper middle-class suburb of Montreal; nor does the peer group oppose parental values. Adolescent life in this community, "objectively and subjectively" is continuous with the succeeding phase of life.—*A. R. Howard.*

2735. Zazzo, R. Critique de la notion de stade en psychologie. (An evaluation of the concept of "stages" in psychology.) *Psychol. franç.*, 1957, 1(2), 31-32.—Following a colloquium on the topic of motor development in children a critical discussion is reported upon the topic of discontinuities in development of children. With exception of Tanner, the discussants conclude that stages are "real" and inherent in the nature of human development, intellectual, motor, and emotional.—B. A. Maher.

(See also Abstracts 2353, 2388, 2433, 2545, 2663, 2792, 2799, 2836, 2841, 2888, 2894, 2942, 3004, 3086, 3116, 3118, 3122, 3123, 3230, 3300, 3302, 3304, 3320)

MATURITY & OLD AGE

2736. Ames, L. B., Walker, R. N., & Goodenough, E. Old age Rorschach follow-up study. *Percept. Mot. Skills*, 1957, 7, 68.—Preliminary results from 61 of the original group of 200 old people suggest that as the normal individual grows older, his emotional and intellectual responsiveness and potential become increasingly "mature," complex, and well structured. But at some point in his later years, the direction of development changes and the response becomes increasingly restricted and like that of an adolescent, child, or preschooler.—C. H. Ammons.

2737. Anderson, John E. Personal and social adjustment in old age. *J. Lancet*, 1957, 77, 146-149. Persons over 65 are in a period of transition when new roles, sometimes undesirable, are thrust on them. Having work to do is particularly important—or a work substitute "or a major activity, with which the older person will have some kind of continuity and sufficient complexity to hold his interest over a long period of time."—G. K. Morlan.

2738. Geill, T. The sociomedical and socio-psychiatric problems of old age. *Acta psychiat.*, 1956, Suppl. 106, 37-47.—The author reports from "De Gamles By" a Copenhagen Hospital caring for 1,600 old persons. He reviews the admissions as to previous treatment and discusses the statistics of Peter Bent Brigham Hospital, especially the causes of delirious reactions. Finally there is an analysis of the ratio of mentally normal to mentally abnormal persons entitled to old age pension in Denmark in 1950 and the outlook for 1990.—R. Kaelbling.

2739. Orbach, H. L., & Shaw, D. M. Social participation and the role of the aging. *Geriatrics*, 1957, 12, 241-246.—Interviews with 133 retired persons were conducted to determine social role behaviors. Major interaction complexes of occupation, family and kinship, community and voluntary associations were studied. A differential rate of participation in interaction complexes provides varying definitions and expectations of the role of the aging. 15 references.—D. T. Herman.

2740. Scott, Frances Gillespie. Mail questionnaires used in a study of older women. *Sociol. soc. Res.*, 1957, 41, 281-284.—This study is based upon the results of 151 questionnaires returned from women 60 years of age and over. Results are analyzed according to day of the week, preliminary letters sent out, follow-up letters with enclosed return post cards, and comparison with other studies.—S. M. Amatora.

2741. Versace, Rita Maloney. Intercultural conceptions of psychological maturity: An exploratory study. *Dissertation Abstr.*, 1957, 17, 1122-1123.—Abstract.

(See also Abstracts 3171, 3188, 3195, 3202, 3392)

SOCIAL PSYCHOLOGY

2742. Abell, Walter. The collective dream in art: A psycho-historical theory of culture based on relations between the arts, psychology, and the social sciences. Cambridge, Mass.: Harvard Univ. Press, 1957. xv, 378 p. \$7.50.—The aim of this volume is to present the psycho-historical theory of culture and to illustrate it by reference to some typical forms of art. The development of the theory is presented in Part 1 (9 chapters). Part 2's 6 chapters include a psycho-historical study of medieval Western culture and its lost backgrounds. The final part (4 chapters) considers aspects and implications of the psycho-historical point of view.—A. J. Sprov.

2743. Argyle, Michael. The scientific study of social behaviour. London: Methuen, 1957. xi, 239 p. 21s.—Designed as a guide for social scientists and not as a textbook of social psychology, this work is divided into 2 parts: Methodology; Generalizations and Theories. Following an introductory chapter concerning the problems of social behavior and the relation to other research fields, the author examines the methods of studying social behavior and the explanation of such behavior. The 3 chapters in the latter part of the text are headed: Interaction Between Two People; Small Social Groups; Human Relations in Industry and Other Social Organizations. 24-page bibliography.—A. R. Howard.

2744. Arieti, Silvano. Some basic problems common to anthropology and modern psychiatry. *Amer. Anthropol.*, 1956, 58, 26-39.—Three basic problems of concern to psychiatry and anthropology are discussed: (1) the probable or real existence of primitive thought; (2) a comparison between the historical and scientific methods of studying personality and culture; (3) the psychological versus the superorganic origin of personality and culture.—H. Angelino.

2745. Blake, Robert R., Helson, Harry, & Mouton, Jane Srygley. The generality of conformity behavior as a function of factual anchorage, difficulty of task, and amount of social pressure. *J. Pers.*, 1957, 25, 294-305.—"Three significant generalizations can be made on the basis of the present findings: (a) conforming responses are more frequent with difficult items than with easy ones and (b) with small rather than large deviations of group opinion from the true responses; (c) there is significant individual consistency in the amount of conforming in tasks having different contents. It thus is seen that conformity behavior is a function of both situational and personal factors in interaction."—M. O. Wilson.

2746. Cartwright, Dwin, & Lippitt, Ronald. Group dynamics and the individual. *Int. J. group Psychother.*, 1957, 7, 86-102.—Strong groups exert strong influences on members toward conformity. These pressures may be directed either toward uniformity of thinking and behavior or to the fostering of heterogeneity of views. Acceptance of either of these conformity pressures may satisfy the emotional

needs of some members while frustrating those of others. Groups must continually cope with deviancy tendencies of those members who are loyal members of other groups and have unique individual interests. These tendencies may be a source of creative improvement or of destructive disruption in the group. Resolution of conflicting interests of members of groups seems to result in a strengthening of the individuals and the group through qualitative improvements in the nature of the interdependence between integrated individuals and cohesive groups. 26 references.—D. D. Raylesberg.

2747. Caylor, John Stenger. **Stimulus ambiguity as a factor in conformity.** *Dissertation Abstr.*, 1957, 17, 1400-1401.—Abstract.

2748. Flescher, Joachim. **The economy of aggression and anxiety in group formations.** *Int. J. group Psychother.*, 1957, 7, 31-39.—Group phenomena are essentially the result of two factors: anxiety and aggression. The core of the group process "lies outside the dynamic platform of Freud's collective psychology." This is because concentration on the destiny of the libido in the process of group formation results in overlooking the great importance of anxiety and aggression in group formation and group activity.—D. D. Raylesberg.

2749. Giles, H. Harry. (Ed.) **Case analyses of social conflict.** *J. educ. Sociol.*, 1957, 30, 289-336.—6 former members of the Center for Human Relations Studies of New York University in their Clinical Seminar applied the subject of conflict episode analysis to social conflict. 5 cases are analyzed, one in full and the others abridged. Included are: (1) struggle of 2 school men; (2) aggressive teen-age gangs; (3) inter-faith project; (4) ignorance, prejudice and community neglect; and (5) the Arab-Israeli conflict.—S. M. Amatora.

2750. Gropper, George Leonard. **A study of the critical requirements of conference behavior.** *Dissertation Abstr.*, 1957, 17, 1402.—Abstract.

2751. Grusky, Oscar. **A case for the theory of familial role differentiation in small groups.** *Soc. Forces*, 1957, 35, 209-217.—The social organization of a psychological clinic is consistent with Parson's generalization regarding the universality of the instrumental-expressive role differentiation in small groups.—A. R. Howard.

2752. Haythorn, William; Couch, Arthur; Haefner, Don; Langham, Peter, & Carter, Launor. **The effects of varying combinations of authoritarian and equalitarian leaders and followers.** *J. abnorm. soc. Psychol.*, 1956, 53, 210-219.—Groups composed of 4 members discussed specific human relations problems presented by film, then composed and recorded dialogue for similar problems. One member of each group was appointed leader, and group composition was varied systematically based upon the California F scale scores of group members to yield all 4 possible combinations of high-F leader, low-F leader, high-F followers and low-F followers. Behavior in the groups was recorded by ratings of individuals, an interaction recording technique, and responses to a Post-Meeting Reaction Sheet. "Results indicate that F-plus appointed leaders differ behaviorally from F-minus leaders, and that F-plus followers differ from F-minus followers. . . . In addition, interaction analyses indicated that the behavior of leaders

was a function of whether their followers were F-plus or F-minus, and the behavior of followers depended on the F-scale scores of their leaders."—A. S. Tamkin.

2753. Henry, Jules. **Types of institutional structure.** *Psychiatry*, 1957, 20, 47-60.—Task-oriented organizations in our culture tend to fall into four types of formal structure: (1) simple, undifferentiated subordination with one head over individuals, all performing a total complex operation; (2) simple, differentiated subordination with one head over specialized working groups; (3) multiple, undifferentiated subordination with several superiors supervising one individual with multiple tasks; (4) multiple, differentiated subordination with several supervisors over specialized working groups. Important problems in interpersonal relations and communications develop as functions of these structures. Certain desirable properties are produced by a specific institutional structure and conversely, the origins of certain properties within a system must be sought first in the structure of the system.—C. T. Bever.

2754. Holder, Elaine Edith. **The role of learning factors in the development of social behavior in laboratory rodents.** *Dissertation Abstr.*, 1956, 16, 1289-1290.—Abstract.

2755. Kahn, Alfred J. **Sociology and social works: Challenge and invitation.** *Soc. Probl.*, 1957, 4, 220-228.—Points out that concrete problems of everyday social work offer the sociologist unlimited opportunities for fruitful investigation and a chance to bridge the fields of sociology and social work.—R. M. Frumkin.

2756. Kidd, Jerry Stuart. **Individual conformity to a group produced standard as a function of group size and length of membership contact.** *Dissertation Abstr.*, 1957, 17, 889-890.—Abstract.

2757. Kishida, Motomi. **(A study of the effects of group norm upon the change of opinions.** *Jap. J. Psychol.*, 1956, 27, 105-110.—3 variables, the size of a group, the members' familiarity with each other, and the method of reaching a group decision, were evaluated for their effect on conformity to the group norm. Conformity was greatest with a medium-sized group of intimates, and with a group in which discussion took place. English abstract, p. 172-173.—J. Lyons.

2758. Loeser, Lewis H. **Some aspects of group dynamics.** *Int. J. group Psychother.*, 1957, 7, 5-19.—"There is . . . no limit to the number of references . . . in this complex field. The problem is not one of finding relevant material but rather a problem of interpretation and synthesis. . . . We have a plethora of fragmentary data but unified concepts of group function are sorely lacking." All true groups possess five essential properties: dynamic interaction, a common goal, relationship of size and function, volition and consent, and a capacity for self direction. "The properties of the four-to-eight group lend themselves peculiarly and accurately to the goal of psychotherapy."—D. D. Raylesberg.

2759. McKee, John P., & Sherriffs, Alex C. **The differential evaluation of males and females.** *J. Pers.*, 1957, 25, 356-371.—Several attitudes are revealed, at least tentatively: (a) college men and women regard men more highly than women; (b)

most Ss deny partiality, showing a veneer of egalitarianism overlying more firmly established beliefs, (c) partiality for men is more marked in women than men, (d) women are extremists—more so than men. The results show that the egalitarianism hypothesis needs testing with different samples. Future papers will provide part of the answers.—*M. O. Wilson.*

2760. **Maisonneuve, J.** *Recherches sur les affinités.* (Studies on friendships.) *Psychol. franç.*, 1957, 1(2), 33-34.—A sample of 300 French men between the ages of 25 and 35 were selected for study. The sample was divided into subgroups according to occupational level and size of town of residence. A questionnaire was devised to record the number, socio-economic level, origin and value of personal friendships. The data are not reported.—*B. A. Maher.*

2761. **Marcuse, Herbert.** *Eros und Kultur: Ein philosophischer Beitrag zu Sigmund Freud.* (Eros and civilization: A philosophical inquiry into Freud.) Stuttgart, Germany: Ernst Klett, 1957. 264 p. 16.80 DM.—A translation from the English (see 30: 2666).

2762. **Merrill, Francis E.** *The self and the other: An emerging field of social problems.* *Soc. Probl.*, 1957, 4, 200-207.—Self-other problems are social problems because people in taking each other into account and viewing themselves through the eyes of others are acting in a specifically social fashion. Such problems are extremely common in American society today. Some of the factors responsible are the emphasis on achieved status, social mobility, competition, differential class socialization, and glorification of certain statuses through the mass media. Examples of self-other problems include those of role-playing, parent-child relationships, peer-group acceptance, dating, love and marriage, conformity and non-conformity, and minority-group status. Common-sense and scientific approaches represent two types of action taken to solve such problems. Self-other problems represent crucial areas for research and action. 27 references.—*R. M. Frumkin.*

2763. **Michigan, University of, Detroit Area Study.** *A social profile of Detroit: 1956.* Ann Arbor, Mich.: Author, 1957. 83 p.—This is the fifth general report (see 30: 7086; 29: 7180; 28: 8674 and 8675), of the interview survey operations of the Detroit Area Study. The general objectives of the 1956 research were: (a) the reasons an individual does or does not work and the meaning of the work, particularly for women; and (b) to ascertain the degree to which members of a metropolitan community accept the same way of life as "right." Put before the reader are the findings on the following in relation to these objectives: residential mobility in greater Detroit, income and labor force participation, women in the labor force, the degree of consensus on important social issues in the greater Detroit area and the political preferences, social characteristics and attitudes of the same population. It is this latter material which is of major interest to psychologists. An appendix furnishes the portion of the interview schedule relevant to the present preliminary study. The comprehensive analysis of all the data obtained will require several years to complete.—*H. Winthrop.*

2764. **Mills, Theodore.** *Developmental processes in three-person groups.* *Hum. Relat.*, 1956, 9, 343-355.—Three-person groups were observed creating stories from TAT pictures by Bales's method.

"Negative-affective content is of central importance in the way relationships in the group develop" into coalition or unstable hostility patterns. One general observation made is that there seemed to be no organizing processes linking the various aspects of the situation to the goal. The question of how this may be related to two-person and higher-order groups is raised.—*R. A. Littman.*

2765. **Payne, Donald Ellsworth.** *Role constructs versus part constructs and interpersonal understanding.* *Dissertation Abstr.*, 1957, 17, 1127-1128.—Abstract.

2766. **Rose, Arnold M.** *Theory for the study of social problems.* *Soc. Probl.*, 1957, 4, 189-199.—"In more recent years, perhaps as a result of our recognition of multiple causation, investigators of social problems have been prone to abandon theory and to accept statements of *ad hoc* association established through statistical correlation." However, despite the emphasis on actuarial studies rather than theoretical ones, the study of social problems can logically be subsumed under two theoretical traditions, namely, social disorganization and conflict theory. The writer attempts to reconstruct these two theories into one general theory of social problems with the suggestion that the theory be tested with concrete rather than abstract problems.—*R. M. Frumkin.*

2767. **Rossi, Peter H.** *Community decision making.* *Admin. Sci. Quart.*, 1957, 1, 415-443.—"Three research approaches to the problems of decision making in local communities have been employed. One type of approach has focused on the characteristics of decision makers as the prime explanation of the decisions they make. A second approach has looked to the social environment of the decision maker for the major explanation, seeing in the activities of partisans—power or influence wielders—the major explanation for the types of decisions made. The third approach has centered on the decision-making process, attempting to follow an issue from inception to settlement. The author evaluates each approach, summarizing at the same time the major information each has yielded. A strategy for further research is suggested calling for comparative studies of decision makers in different institutional meetings as they work through the careers of a variety of community issues. Such comparative studies will be able to transcend the particular and lead to a generalized frame of reference for understanding decision making in the local community." 40 references.—*V. M. Staudt.*

2768. **Rothstein, Jerome.** *Communication, organization, and science.* Indian Hills, Colo.: The Falcon's Wing Press, 1958. xcvi, 110 p. \$3.50.—"Intimately related to measurement and communication are the concepts of entropy and of organization. Among the chief aims of this book is the aim to develop these concepts in relation to each other and to explore some of the consequences of this relationship." The author's philosophy provides "... a precise characterization of the role of theory in organizing observation, a quantitative measure of organization applicable not only in this connection but to systems-engineering design in general, and an indication of why complex organic evolution should probably occur even if it had previously been thought that entropy increases demanded by the second law of thermodynamics imply the opposite trend."—*D. E. Meister.*

2769. Runkel, Philip J. Equilibrium and "pleasantness" of interpersonal situations. *Hum. Relat.*, 1956, 9, 375-382.—The data of an earlier study by Jordan (see 28: 2422) which had been analyzed according to Heider's "balance" theory were reanalyzed according to Newcomb's "strain" theory. "The Newcomb model successfully predicted two non-overlapping classes of response, where the state of "balance" defined by Jordan did not do so."—R. A. Littman.

2770. Schellenberg, James A. Social choice and similarity of personal values. *Sociol. soc. Res.*, 1957, 41, 270-273.—Investigated the hypothesis that social choice tends to be positively related to a similarity of personal values. Results based on tests of personal values, and a sociometric questionnaire by 34 college men supported this hypothesis.—S. M. Amatora.

2771. Sinha, Avadh Kishore Prasad. Tanava. (Tension.) *Shiksha*, 1956, 8(3), 32-38.—Group tensions include communal tension, industrial tension and international tension. The place of stereotypes, misunderstanding, propaganda, and tendency of exploitation has been discussed.—U. Pareek.

2772. Speroff, B. J. The "behind-the-back" way in training leaders. *Personnel J.*, 1957, 35, 411-412, 435.—In the "behind-the-back" method of training conference leaders, one of the leaders is given a cryptic statement of the problem situation. During the minute he is studying the situation and planning his strategy, the other leaders are told the roles they are to play. The conference leader then conducts his conference any way he wishes for a stated period usually 15 to 20 minutes. The leader then sits facing away from the others who are sitting in a circle. Each person in the circle is allowed to make just one brief comment as to his personal reactions to the conference. Then the leader rejoins the others by turning his chair around and is given an opportunity to react to the comments of the others before the conference is thrown open for general discussion. Follow-up 3 months later showed this type of training quite successful in producing group centered conferences with increased individual involvement and participation.—M. B. Mitchell.

2773. Thomas, Lawrence G. Prospects of scientific research into values. *Educ. Theory*, 1956, 6, 193-214.—Psychologists began to study "values" shortly after World War I with the advent of the interest inventories. Much of the subsequent research has been naive in that it shows only what individuals and groups desire, not what is desirable; "only what is wanted, not what is worth wanting." These studies have failed to recognize also that "there is a difference between what a person says he wants or likes and what he will seek with active effort in a concrete situation." After a critique of idealist and realist views of "value-discovery" processes, an operational or instrumentalist conception is developed and ways are discussed whereby philosophers and psychologists can cooperate in the empirical study of processes. Commentary by Theodore Brameld and B. Othanel Smith.—A. E. Kuenzli.

2774. Weiss, Robert S. Processes of organization. Ann Arbor, Mich.: Survey Research Center, Institute for Social Research, University of Michigan, 1956. ix, 117 p.—A large scale organization was studied to determine the factors involved in the

nature of its structure, the lines of communication within the structure, the sources of individual differences in participation, etc. The aim was to understand large scale organizations in general. Analysis is in terms of structure-function theory as developed by Newcomb, Parsons, Hawley and Levy. 34-item bibliography.—R. A. Littman.

(See also Abstracts 2254, 2257, 3018)

METHODS & MEASUREMENTS

2775. Brownlee, K. A. A note on the effects of nonresponse on surveys. *J. Amer. statist. Ass.*, 1957, 52, 29-32.—A model for the situation in which the health and smoking habits of the individual influence the rate of recruitment in a survey of the association between cigarette smoking and lung cancer is presented and some of its properties explored. Conditions which permit the making of valid inferences from this model are indicated, the principal one being that the rate of recruitment be equal for all groups; healthy smokers, healthy nonsmokers, etc.—C. V. Riche.

2776. Burgess, George Craydon. Prediction of rater differences in the quality of halo effect. *Dissertation Abstr.*, 1957, 17, 1116.—Abstract.

2777. Campbell, Ernest Queener. The attitude effects of educational desegregation in a southern community: A methodological study in scale analysis. *Dissertation Abstr.*, 1957, 17, 1405-1406.—Abstract.

2778. Clarke, Howard Weston, Jr. An experimental investigation of theorems relating to the structure and content of rating instruments. *Dissertation Abstr.*, 1957, 17, 1116-1117.—Abstract.

2779. Dunn, Theodore F., Goldstein, Leon G., & Berkhouse, Rudolph G. Effect of item construction principles on difficulty, reliability, and validity. *USA TAGO Person. Res. Br. Tech. Res. Note*, 1956, No. 64, 31 p.—The effect on difficulty, reliability, and validity of violating 4 rules of test item construction was studied by analyzing (analysis of variance and chi-square) the scores of samples (N's of 200) of enlisted men on specially developed tests varying in the way the items on identical subject matter were written. Comparisons were made between scores on items in which the lead was an incomplete statement and items in which the lead was a question; between items with no cues in the lead and those with cues to the correct alternative; items with alternatives of equal length versus extra-long correct alternative; and grammatical consistency versus inconsistency of lead and alternatives. Items with cues, extra-long correct alternatives, and grammatical inconsistencies were found to be less difficult. However, no significant effects on reliability or validity of the items were apparent.—TAGO.

2780. Hollander, E. P. The friendship factor in peer nominations. *Person. Psychol.*, 1956, 9, 435-447.—An objection to peer evaluation procedures, like the peer nomination, is that the ratings obtained are loaded with a friendship factor. This study deals directly with this issue by focusing upon the impact of friendship ties on the validity obtained for peer nomination scores. Peer nominations were obtained during OCS training at a U. S. naval school, using an experimental design involving several forms, in-

structions, and administrations. The results demonstrate that, while friends appear to be favored for high nominations, the validity of peer nomination scores is not adversely affected by considerations of friendship. 21 references.—*A. S. Thompson.*

2781. Killian, Lewis M. An introduction to methodological problems of field studies in disasters. *Nat. Acad. Sci.—Nat. Res. Coun. Publ.*, 1956, No. 465, (Disast. Stud. No. 8). v, 35 p.—An introduction to the special problems of conducting field studies in disaster-stricken communities. Problems in selection of events to study, research design, selection of subjects, data collection and analysis, timing, retrospective interviewing, entree into the community, and reporting of findings are discussed.

2782. Landen, Delmar Leo, Jr. An experimental investigation of theorems concerning the training of raters. *Dissertation Abstr.*, 1957, 17, 1120-1121.—Abstract.

2783. Mayo, George Douglas. Peer ratings and halo. *Educ. psychol. Measmt.*, 1956, 16, 317-323.—For peer ratings there is a substantial halo effect but this does not account for all the variance. This conclusion is based on a study of peer ratings of intelligence and effort with objective measures of both. Intercorrelations of these four variables were used as a basis for reaching the conclusion cited.—*W. Coleman.*

2784. Michael, Donald B. Some factors tending to limit the utility of the social scientist in military systems analysis. *Operat. Res.*, 1957, 5, 90-96.—The social scientist who is part of a research team composed of a variety of scientists and military personnel working on systems research is faced with problems. These are: (1) data collection (absence of or difficulty of collecting numerical data); (2) interpersonal or personality (hardware scientist finds it difficult to cope with the nonrational aspect of human behavior); (3) conditions under which a statement is accepted as a fact or explanation (difficulty of consensus on "provable" level of conceptualization); (4) role-playing (acting as a civilian and as a "soft" rather than "hard" scientist).—*M. R. Marks.*

2785. Michigan, University of, Institute for Social Research. Institute for Social Research, 1946-1956. Ann Arbor, Mich. Author, 1957. 61 p.—This is a summary of the origin, growth, and research activities of the Survey Research Center and the Research Center for Group Dynamics at the University of Michigan. Research projects on various topics are summarized and the development and application of social research is discussed.—*C. G. Brown.*

2786. Miranda, Fredeswinda. La evaluación de los intereses. (The evaluation of interests.) *Pedagogía*, 1956, 4(2), 87-104.—The most reliable and valid techniques for evaluating human interests and values are considered.—*E. Sánchez-Hidalgo.*

2787. Rhodes, Albert Lewis. The effects of status, social participation, religious fundamentalism, and alienation on a measure of authoritarianism. *Dissertation Abstr.*, 1957, 17, 1143.—Abstract.

2788. Stuckert, Robert Paton. A configurational approach to social prediction. *Dissertation Abstr.*, 1957, 17, 1408-1409.—Abstract.

2789. Thomas, Clayton J., & Deemer, Walter L. The role of operational gaming in operations research. *Operat. Res.*, 1957, 5, 1-27.—Operational gaming is the actual play of a game to reach solution, in contrast with an analytic approach. It has popular appeal, but is not well understood, and is not as effective as is commonly supposed. It lacks sure guides to adequacy of solution. Its appearance of reality leads to non-awareness of its limitations; conversely, artificial restrictions are sometimes erroneously assumed for the analytic approach. Operational gaming is too dependent on a very large sample of plays for a valid solution. Undesirable expense or errors are often produced. 15 references.—*M. R. Marks.*

2790. Vyngantas, Peter Vytautas. An investigation of some effects of the pretest on the measurement of attitude change. *Dissertation Abstr.*, 1957, 17, 890-891.—Abstract.

2791. Watson, William Arthur. Contrast, assimilation, and the central tendency effect. *Dissertation Abstr.*, 1957, 17, 1396-1397.—Abstract.

(See also Abstracts 2740, 2840, 3301)

CULTURES & CULTURAL RELATIONS

2792. Alexander, Theron, & Anderson, Robert. Children in a society under stress. *Behav. Sci.*, 1957, 2, 46-55.—Through the use of the TAT with children of the Northern Cheyenne Indians the possibility of a reflection of a disintegrating society in the perceptions of its developing members was studied. Conclude that there is a coexistence between the conditions of deprivation and disintegration in the security system of a culture and the perceptions of individuals. 17 references.—*J. Arbib.*

2793. DeFleur, Melvin L., & Cho, Chang-Soo. Assimilation of Japanese-born women in an American city. *Soc. Probl.*, 1957, 4, 244-257.—An investigation of selected pre- and post-migration factors and their influence on the assimilation achieved by 80 Japanese immigrant women residing in Seattle, Washington. Half were Buddhists and half were Christians. An index of assimilation developed which included such items as language behavior, recreational behavior, observance of holidays, dwelling area preferences, family beliefs and practices, and visiting habits. Of the items, language behavior seemed the most significant test of assimilation and this was closely tied in with educational attainment and religious affiliation. A significant relationship existed between church affiliation and the composite assimilation score, i.e., since the Buddhist church keeps the women in close contact with Japanese culture the women affiliated with the Christian church were most assimilated. 19 references.—*R. M. Frumkin.*

2794. Frumkin, Robert M. The Jewish passion for social justice: A social psychological analysis. *Ethos*, 1957, 2, 40-42.—The Gentile attitude toward Jews, the fact that Jews were forced to become urbanites, marginal men, taught Jews that survival depended on their passion for social justice, that is, this Jewish trait was learned in response to the Gentile attitude toward Jews.—*R. M. Frumkin.*

2795. Goody, Jack. (Ed.) The developmental cycle in domestic groups. New York: Cambridge University Press, 1958. vii, 145 p. \$4.00. (Cam-

bridge Pap. soc. Anthropol., No. 1.)—Following an analytical essay by Meyer Fortes, data from 4 separate societies, the Iban of Borneo, the Lo Dagaba of the Gold Coast, the Pastoral Fulani of Western Sudan and the Trobriand Islanders, are analyzed and interpreted within the framework of Fortes' proposed concept—"the developmental cycle in domestic groups." This is viewed as the basic process by which both the elements and components of any social system are maintained and replaced through time.—H. Angelino.

2796. Heuse, Georges A. *Études psychologiques sur les noirs soudanais et guinéens.* (Psychological studies of Sudan and Guinea Negroes.) *Rev. Psychol. Peuples*, 1957, 12, 35-68.—This presents the detailed psychological results of a two-year study of 92 African males, also studied in anthropometry, morphology, biochemistry, physiology, and psychophysiology. Compared with similar whites, the differences in perception of illusions and of weight point out the lack of ethnic norms and the danger of premature generalizations based on limited ethnic representation. A variety of memory measures indicates that the African Negro's memory is about .8 that of the white European or American. Similar comparisons and results are recorded for attention, performance, development, and personality, including some results with projective tests. Includes details of methods, directions, and questions, together with a 78-item bibliography.—R. O. Peterson.

2797. Iga, Mamoru. The Japanese social structure and the source of mental strains of Japanese immigrants in the United States. *Soc. Forces*, 1957, 35, 271-278.—Discussed are the findings of an earlier survey by the writer which indicated that "first generation" Japanese (Issei) strongly maintained the traditional Japanese values, the Japanese social structure, the sources of strain for the immigrant, and the reactions to these strains.—A. R. Howard.

2798. Jahoda, Gustav. Assessment of abstract behavior in a non-Western culture. *J. abnorm. soc. Psychol.*, 1956, 53, 237-243.—The question was raised whether tests of abstract ability were valid for cross-cultural comparisons. The first group of Ss consisted of 27 boys, about 15 years of age, from the Accra urban area, all of whom received the Goldstein-Scheerer Cube Test. The second group consisted of 317 boys who received the Raven Progressive Matrices Test on three successive weeks. The third group consisted of 32 boys who took the Kohs Block Design Test, administered and scored according to McConnell. The results showed that the cube Test performance is affected by environmental influences, and that the Progressive Matrices is susceptible to practice effects. Paradoxically the third group did about as well as McConnell's Ss on the Kohs Blocks who were shown to perform at a level comparable to Wechsler's standardization group. It was concluded that tests of abstract ability are no more "culture-free" than tests of intelligence. 30 references.—A. S. Tamkin.

2799. McCary, J. L., & Tracktir, Jack. Relationship between intelligence and frustration-aggression patterns as shown by two racial groups. *J. clin. Psychol.*, 1957, 13, 202-204.—Rosenzweig P-F test responses of Northern Negro and white school children aged 14-22 of a previously reported study were re-analyzed. Each racial group was classified

into lower, middle, and upper thirds on the basis of the Otis scores of its own group. The two racial groups were significantly different in intelligence at all three ability classifications. The P-F scores of the racial groups for the sexes separately were compared at each ability grouping. In general no consistent relationships were found between intelligence and P-F patterns. Of the 42 comparisons among the ability groupings, five were statistically significant. These latter were not highly consistent with the results of the previous study.—L. B. Heathers.

2800. Mangin, William. Drinking among Andean Indians. *Quart. J. Stud. Alcohol*, 1957, 18, 55-66.—Described are the habits in Vicos, a rural intermontane village, where drinking is essentially integrative, as is the total fiesta system among the people. 25 references.—W. L. Wilkins.

2801. Posinsky, S. H. The problem of Yurok anality. *Amer. Imago*, 1957, 14, 3-31.—Such students of Yurok (N.W. California) precontact culture as Róheim, Erikson, and Goldschmidt have held sharply contrasting views concerning Yurok anality and its relation to psychoanalytic theory. "Despite obvious gaps in the ethnographic data, Yurok anality is a concept which possesses both descriptive and genetic validity. However, the data are not really adequate to a decisive confirmation or refutation of analytic theory in classical terms." 88 references.—W. A. Varvel.

2802. Prothro, E. Terry, & Keehn, Jack D. The structure of social attitudes in Lebanon. *J. abnorm. soc. Psychol.*, 1956, 53, 157-160.—"Previous studies with the F scale in the Near East had raised some question about the factors being measured by the scale. In order to gain more information on authoritarianism in this culture, an analysis was made of items from the F scale together with items from a scale of Eysenck's which seemed to measure tough-mindedness and a political dimension. It was found that there was a general factor running through almost all the F scale items, and this factor was tentatively labeled 'cynicism.' . . . A second factor was extracted, which seemed to be the same as that previously identified as a political dimension. Our data suggested that this factor might better be interpreted on a personality dimension, which we tentatively labeled as 'punitiveness' or 'authoritarian aggression'." —A. S. Tamkin.

2803. Ram, Pars. A UNESCO study of social tensions in Aligarh, 1950-1951. Ahmedabad, India: New Order Book, 1955. xv, 206 p.—This posthumous work is based upon an "historical, economic sociological and political study of the city of Aligarh; intensive study of recent crises and episodes involving social tension; . . . gossip, spontaneous conversation . . . a prolonged interview (2 to 6 hours) with 50 adult Hindu males and 50 adult Muslim males." Detailed presentations of responses to interview questions, plus summary tables, are analyzed in terms of political, ethnic, caste, religious and personal problems and concepts.—R. A. Littman.

2804. Service, Elman R. A profile of primitive culture. New York: Harper, 1958. xiv, 474 p. \$6.00.—Brief descriptions of social life with due attention to history, geography, and child-rearing, plus a bibliography for further enquiry attend twenty chapters dealing with the following social groupings:

Arunta, Yahgan, Andaman Islanders, Canadian Eskimo, Reindeer Tungus, Cheyenne, Nuer, Navaho, Jivaro, Nootka, Trobriand, Tahitians, Kalinga, Maya, Inca, Ashanti, and village descriptions of Yucatan, Morocco, China and India.—*L. M. Hanks, Jr.*

2805. Solari, Aldo. *Las clases sociales y su gravitación en la estructura política y social del Uruguay.* (Social classes and their gravitation in the political and social structure of Uruguay.) *Rev. mex. Sociol.*, 1956, 18, 257-266.—The following topics are briefly considered: numerical composition of Uruguayan classes, their economic situation, their organization, and their connection with the political and social structure of Uruguay.—*E. Sánchez-Hidalgo.*

(See also Abstracts 2317, 2730, 2741, 2766, 2777, 2825, 3029, 3362)

SOCIAL INSTITUTIONS

2806. Andrews, Wade Huff. *Some correlates of rural leadership and social power among inter-community leaders.* *Dissertation Abstr.*, 1957, 17, 1402.—Abstract.

2807. Bogardus, Emory S. *Cooperatives and social nearness.* *Sociol. soc. Res.*, 1957, 41, 285-289.—The author discusses ways in which cooperatives augment or create social nearness in that they build good will, understanding, equitable living together, helpfulness, a democratic spirit, and give value to personality.—*S. M. Amatora.*

2808. Bott, Elizabeth. *Urban families: The norms of conjugal roles.* *Hum. Relat.*, 1956, 9, 325-342.—20 families were studied with respect to agreement concerning various roles and activities. It was found that "there was less consensus on familial norms than is commonly assumed, and second that many informants found it difficult to state norms explicitly." "No statistical data are provided for the discussion which is couched in terms of reference group theory. It is suggested that the nature of the family's associations with other families is an important determiner of the degree and kinds of agreements which will be found."—*R. A. Littman.*

2809. Bowerman, Charles E. *Adjustment in marriage: Over-all in specific areas.* *Sociol. soc. Res.*, 1957, 41, 257-263.—This study was based upon a sample of 102 couples from adult education classes and PTA groups. Questionnaires were filled out independently by both husband and wife. Reports of the study indicate the degree of adjustment in 9 different areas of marital relationship.—*S. M. Amatora.*

2810. Burchinal, Lee G., Hawkes, Glenn R., & Gardner, Bruce. *Personality characteristics and marital satisfaction.* *Soc. Forces*, 1957, 35, 218-222.—Small-town parents from Iowa, Ohio, Kansas and Wisconsin were administered the 35-item personality (neurotic) inventory reported by Burgess and Wallin and also 28 items adapted from the latter's marital success indices. Support is found for the hypothesis that personality characteristics are associated with marital satisfaction.—*A. R. Howard.*

2811. Canning, Ray Russell. *Changing patterns and problems of family life in Provo, Utah, 1905-1955.* *Dissertation Abstr.*, 1957, 17, 1146-1147.—Abstract.

2812. Carstenson, Blue Allan. *A method for studying how people perceive the power structure in their communities as tested in five Michigan communities.* *Dissertation Abstr.*, 1957, 17, 1263.—Abstract.

2813. Christie, Richard. *Eysenck's treatment of the personality of communists.* *Psychol. Bull.*, 1956, 53, 411-430.—The data, presented by Eysenck (see 30: 909), concerned with the notion that communists and fascists are similar in being "tough-minded" and "authoritarian" are critically examined. A detailed treatment of the sampling and measurement techniques employed to obtain the relevant data are presented. The author concludes that: (1) "The samples studied are not representative of the present population, and that generalizations drawn from these samples are therefore unwarranted; (2) the 'tough-mindedness' scale leads to misleading comparisons among members of various political parties because of biases built into the scoring system." In addition, the author concludes that the communists and fascists did differ from one another in many "crucial aspects."—*W. J. Meyer.*

2814. Christie, Richard. *Some abuses of psychology.* *Psychol. Bull.*, 1956, 53, 439-451.—This is the final paper in a series of 3 interchanges by Christie and Eysenck (see 32: 2813, 2817). In this article Eysenck's reply to specific criticisms are examined. 18 references.—*W. J. Meyer.*

2815. Clark, Walter Houston. *The psychology of religion.* New York: Macmillan, 1958. xii, 485 p. \$5.95.—This "introduction to religious experience and behavior" attempts "to define and describe the field." Part 1 provides a general orientation, with definitions of religion and a description of methodology. Part 2 deals with various aspects of religious growth: psychological sources of religion, developmental aspects, conversion experiences, etc. Part 3 concerns "the chief ways in which religion expresses itself": mysticism, prayer, worship, abnormal psychology, and therapy. Suggested readings, discussion topics, and problems for investigation are included as study aids.—*A. Eglash.*

2816. Crawford, Fred R., & Moore, Harry E. *Relocation of disaster-displaced families.* *Sociol. soc. Res.*, 1957, 41, 264-269.—The authors analyze the effects of the tornado in the Waco and San Angelo areas. Losses sustained, family characteristics, and emotional difficulties are analyzed. The authors point to factors which should be given attention in any plan to relocate families for any reason.—*S. M. Amatora.*

2817. Eysenck, H. J. *The psychology of politics and the personality: Similarities between fascists and communists.* *Psychol. Bull.*, 1956, 53, 431-438.—This paper is a reply to the criticisms leveled by Christie (see 32: 2813) toward Eysenck's research on certain personality traits of communists and fascists. The problems raised by Christie with respect to the sampling and measurement procedures used by Eysenck are discussed.—*W. J. Meyer.*

2818. Fritz, Charles E., & Mathewson, J. H. *Convergence behavior in disasters: A problem in social control.* *Nat. Acad. Sci.—Nat. Res. Conn. Publ.*, 1957, No. 476, (Disast. Stud. No. 9). ix, 102 p.—An analysis of the informal, spontaneous movement of people, messages, and supplies toward disaster areas and toward various points within disaster-

related zones, based on a comprehensive review of disaster research findings. The combined effect of personal, informational, and material forms of convergence is shown to constitute a universal problem of social control in the post-disaster period. The report discusses the scope of the various forms of convergence, the types of convergers, the motivational factors in convergence, and various methods and techniques for controlling convergence. 82 references.

2819. Gilbert, Robert I. **The acceptance, knowledge, and use of family-planning techniques as related to social-class membership in the white population of a southern community.** *Dissertation Abstr.*, 1957, 17, 1147.—Abstract.

2820. Gross, Feliks. **Sociología de los movimientos subterráneos de resistencia.** (The sociology of underground resistance movements.) *Rev. mex. Sociol.*, 1956, 18, 341-374.—The following topics are considered: the resistance movement as a sociological problem, norms prevailing in resistance movements, their impact upon society, their social structure, values and attitudes in underground movements, types of personality developing under a foreign government or a native dictatorship, types of underground organizations, conquerors and underground activities, effectiveness of underground movements, etc.—E. Sánchez-Hidalgo.

2821. Gustafson, James. **Protestant sociology of the family.** *Relig. Educ.*, 1957, 52, 89-93.—Most American Protestants come from the middle class, and "The world of the middle class provides the prevailing meanings and values of the family." Three definitions of the Protestant family are reviewed and their inadequacies discussed.—C. K. Morlan.

2822. Hostie, Raymond. **C. G. Jung und die Religion.** (C. G. Jung and religion.) Freiburg and Munich: Karl Alber, 1957. x, 303 p.—(See 32: 2823).

2823. Hostie, Raymond. **Religion and the psychology of Jung.** New York: Sheed & Ward, 1957. vi, 249 p. \$3.50.—This historical approach to analytical psychology's relationship to religion expresses an appreciation of Jung's contributions (his profound observations and conceptualizing) as well as a criticism of his writings (compromises rather than syntheses; ontological as well as psychological). Jung's empirical method, his basic concepts (energetic concept of libido, imago and symbol, archetypes, individuation), and his relationship to Freud (denying that libido is solely sexual) are described. Other topics include self, evil, Trinity and quaternity, phenomenology, and the relationship between confession and therapy.—A. Eglash.

2824. Houtt, Thomas Ford. **A functional theory of religion.** *Sociol. soc. Res.*, 1957, 41, 277-280.—The author proposes a theory of religion which he deems functional because it is cast in terms of at least one aspect of religion's relationship to conditions necessary for existence. He deems contributions to the struggle for survival the ultimate justification for the existence of all human institutions.—S. M. Amatori.

2825. Hunt, Chester L., & Collier, Richard W. **Intermarriage and cultural change: A study of Philippine-American marriages.** *Soc. Forces*, 1957, 35, 223-230.—Data from interviews with 20 Cau-

casian Americans married to Filipino women supply the basis for a discussion of the effects of such marriage. Comparisons are drawn with studies dealing with intermarriages in other cultures.—A. R. Howard.

2826. Jung, C. G. **Psychology and religion; west and east.** New York: Pantheon Books, 1958. xiii, 699 p. \$6.00.—Jung's shorter works on religion and psychology include, among others, a new version of the 1938 Terry Lectures on Psychology and Religion, A Psychological Approach to the Dogma of the Trinity, Transformation Symbolism in the Mass, Psychotherapists or the Clergy, Psychoanalysis and the Cure of Souls, Answer to Job, Yoga and the West, The Psychology of Eastern Meditation, The Holy Men of India, Foreword to Suzuki's "Introduction to Zen Buddhism" and the Foreword to the "I Ching."—E. W. Eng.

2827. Kanin, Eugene J. **Value conflicts in Catholic device-contraceptive usage.** *Soc. Forces*, 1957, 35, 238-243.—Data from Planned Parenthood contraceptive clinics indicate that many American Catholics "have taken on secular patterns of conception control. Negative motivation to parenthood is less affected by Church doctrine than popularly thought."—A. R. Howard.

2828. Powell, Elwin Humphreys. **The city and communal life: A re-examination of urban sociological theory.** *Dissertation Abstr.*, 1957, 17, 1407.—Abstract.

2829. Rapoport, Robert N. **Oscillations and sociotherapy.** *Hum. Relat.*, 1956, 9, 357-374.—The development of the "therapeutic community" has laid bare a number of institutional processes that seem to stem from the "humanistic themes of permissiveness, democracy, communalism, and reality-testing." "A recurring tendency for social disorganization and intra-personal and interpersonal tensions to be generated in the system" appears. The consequent oscillations are seen to have positive therapeutic values and the harnessing of "these interpersonal tension states is called sociotherapy."—R. A. Littman.

2830. Rennie, Thomas A. C., Srole, Leo; Opler, Marvin K., & Langner, Thomas S. **Urban life and mental health.** *Amer. J. Psychiat.*, 1957, 113, 831-837.—"The purposes of the investigation, as suggested in its epidemiological approach, are three: (1) to establish the prevalence in the study population of various forms of mental health and illness across the entire mental health spectrum; (2) to determine the differential distribution of these variants of mental health among the many cross-cutting demographic subgroups in the study population; (3) to trace factors etiologically significant for mental disturbance to their sources in specific sociocultural conditions."—N. H. Pronko.

2831. Schulze, Robert Oscar. **Economic dominance and public leadership: A study of the structure and process of power in an urban community.** *Dissertation Abstr.*, 1957, 17, 1407-1408.—Abstract.

2832. Spiegel, John P. **The resolution of role conflict within the family.** *Psychiatry*, 1957, 20, 1-16.—Study of social role in the family facilitates understanding of the relationship of the individuals to each other and the group. A group of families with emotionally disturbed children revealed a conflict or disequilibrium situation between the parents, involv-

ing the children. The transactional processes leave a stamp upon the personality of the child. In a small-scale social system, such as the family, most processes concern equilibrium. Usually complementarity of roles is high, decision-making low, and most events take place automatically. Inevitable strains, analyzable in terms of the cognitive, goal, allocative, instrumental, and value structures of the roles, give rise to disequilibrium. Re-equilibrium is sought by attempts to restore the complementarity of roles through 11 steps which are divided into two groups: the first five steps are manipulative, termed 'role induction,' the last five steps are based on mutual insight, 'role modification.' The sixth step is transitional since it can lead to induction or modification.—C. T. Bever.

2833. Strunk, O., Jr. Protestant-Catholic tensions: A repetition and extension study in simple frequency-type content analysis. *Boston Univ. Grad. J.*, 1957, 5, 156-157.—A repetition of a previous content analysis study conducted by another author (see 27: 1127) yielded essentially the same results, namely that Protestant-Catholic tensions have steadily increased from 1939 to 1949. Extension of the initial study of two religious magazines, however, indicates that Protestant-Catholic tensions seem to have decreased since 1949.—O. Strunk, Jr.

2834. Thomas, John L. The sociology of the family. *Relig. Educ.*, 1957, 52, 83-88.—Roman Catholic approach to the family assumes that everything created by God is good; grace builds on nature; the divine plan is revealed in the structure of the universe. "Since grace builds upon nature 'in the nature of things' married life offers wide opportunities for human development and fulfillment."—G. K. Morlan.

2835. Wallace, Laurene Alice. Carsonville: An American village viewed sociologically. *Dissertation Abstr.*, 1957, 17, 1144-1145.—Abstract.

2836. Warning, Margaret Cynthia. The implications of social class for clothing behavior: The acquisition and use of apparel for girls seven, eight, and nine years of age in three social classes in Des Moines, Iowa. *Dissertation Abstr.*, 1957, 17, 1409-1410.—Abstract.

2837. Winter, Gibson. Love and conflict: New patterns in family life. Garden City, N. Y.: Doubleday, 1958. 191 p. \$3.50.—A need for intimacy is postulated, with the family as "the exclusive sphere of intimacy in modern life." This book seeks to find paths for a healthy life for the family, using a biblical conception of family and community life. Through an examination of contemporary social institutions, the author discusses ways in which the modern American family, uprooted as a result of depression and war, can "put down its roots."—H. D. Arbitman.

(See also Abstracts 2659, 2687, 3022, 3123, 3127, 3130, 3298)

LANGUAGE & COMMUNICATION

2838. Berlo, David K., & Guley, Halbert E. Some determinants of the effect of oral communication in producing attitude change and learning. *Speech Monogr.*, 1957, 24, 10-20.—Factors such as congruity, i.e., internal pressure to make attitudes towards speaker and proposition congruent; serial position of statements; strength of assertions; predisposition; and amount of information learned were

investigated in 174 subjects. Various hypotheses were made which, in large measure, indicated that congruity, serial position, and assertion strength, could be used to predict attitude change and learning. Amount retained was not dependent on initial attitude nor did amount learned indicate the direction of change of attitude.—D. Lebo.

2839. Black, John W. Multiple-choice intelligibility tests. *J. Speech Dis.*, 1957, 22, 213-235.—Materials from which 24 multiple-choice intelligibility tests may be reproduced are presented, together with instructions for both speakers and listeners.—M. F. Palmer.

2840. Brinton, James E. Subscriber vs. non-subscriber method for studying effects. *Journalism Quart.*, 1957, 34, 92-93.—"Interviews . . . (with) . . . subscriber and non-subscriber groups before and after the printing of the subject matter can be used to study increases in information level and attitude change. . . . Results . . . indicate: (1) subscribers score significantly higher on information tests about the subject; (2) intensity of attitude toward the subject is significantly higher among subscribers. . . ."—D. E. Meister.

2841. Carter, Richard F. The perceived appeals of television program content. Madison, Wisc.: University of Wisconsin Television Laboratory, 1957. v, 178 p.—76 types of television program content were formulated. A sample audience of residents 16 years and older in Stoughton, Wisconsin, were asked to respond to content type descriptions on a five-point scale. Nine factors were derived from the data: (a) general factor; (b) information or entertainment removed from day-to-day sphere of viewer; (c) information or entertainment close to day-to-day sphere of viewer; (d) content far removed in time for place from viewer; (e) sports entertainment; (f) aesthetic entertainment; (g) glamorous versus earthy content; (h) personal adjustment information; and (i) fun.—D. E. Meister.

2842. Corso, John F. Confirmation of the normal threshold for speech on C.I.D. Auditory Test W-2. *J. acoust. Soc. Amer.*, 1957, 29, 368-370.—The threshold of speech intelligibility was measured on 139 young subjects with a negative otological and noise-exposure history. The mean threshold was about 18.5 db and the variability among Ss was about 4.5 db. These results confirm previous experiments with smaller numbers of Ss.—I. Pollack.

2843. Creelman, C. Douglas. Case of the unknown talker. *J. acoust. Soc. Amer.*, 1957, 29, 655.—Word intelligibility tests were conducted in noise with a varying number of talkers presented on a single test. As the number of different talkers is increased, word intelligibility declines somewhat. The effects, however, are small in comparison with the changes in performance observed with recognition machines listening to a varying number of talkers.—I. Pollack.

2844. Flanagan, James L. Difference limen for formant amplitude. *J. Speech Dis.*, 1957, 22, 205-212.—4 experienced listeners judged the discriminable changes in the amplitude of the second formant of a synthetic vowel sound. The stimulus was a vowel (ae). The results indicate that a change of 3 db in the amplitude of the second formant is detected approximately 50% of the time for both inflection pat-

terns. For an inflection pattern 120 cps monotone and a linear inflection from 95 to 105 cps.—*M. F. Palmer.*

2845. Flanagan, James L. Estimates of the maximum precision necessary in quantizing certain "dimensions" of vowel sounds. *J. acoust. Soc. Amer.*, 1957, 29, 533-534.—Several continuous formant tracking systems have yielded satisfactory reproductions of speech signals. It is often desirable to quantize the output of such systems with the minimal number of quantal steps which will preserve performance. Results of psychoacoustic experiments are used to estimate the necessary precision. The channel capacity necessary to transmit the output of the system is about 400 bits/sec.—*J. Pollack.*

2846. Fry, D. B., & Denes, P. On presenting the output of a mechanical speech recognizer. *J. acoust. Soc. Amer.*, 1957, 29, 364-367.—The phonetic output of a mechanical speech recognizer was presented to experimental subjects either in the form of typewritten phonetic words or spoken words. Substantially higher scores were obtained with auditory presentation than with visual presentation. However, using a subject as a post-editor upon the recognizer did not substantially improve the level of performance of the recognizer.—*J. Pollack.*

2847. House, Arthur S. Analog studies of nasal consonants. *J. Speech Dis.*, 1957, 22, 190-204.—9 trained listeners responded to tests of electrical analogs of the nasal and vocal tracts used to simulate the articulation of 3 nasal consonants of American English. Outputs of the consonant-involved configurations of the analog are distinguishable one from the other with minor inconsistencies in the data. 65% of the bilabial stimuli were identified as M. The results of determining whether listeners can distinguish the difference between M and N and NG compare fairly well to studies of listeners to human nasal consonants produced in isolation and in syllables.—*M. F. Palmer.*

2848. Lenneberg, Eric H. A probabilistic approach to language learning. *Behav. Sci.*, 1957, 2, 1-12.—Ss were taught languages consisting of four color words with the task of discovering the meaning of the words by observing the speech behavior of the entire language community. The languages had words whose frequency distributions represented systematic distortions from a previously established English distribution. If the reference relationship in the nonsense language is identical with that of the S's native tongue, the learning task is easy; but distortions in this relationship make the task harder.—*J. Arbit.*

2849. Ludlum, Thomas Spencer. A study of techniques for influencing the credibility of a communication. *Dissertation Abstr.*, 1957, 17, 1151.—Abstract.

2850. Lundeen, Dale J., Ptacek, Paul H., Starr, Clark, D., & Henrikson, Ernest H. The effects of a language training program on foreign soundingness. *Speech Monog.*, 1957, 24, 74-76.—A report of one aspect of the evaluation of the foreign language training program at the University of Minnesota is presented. The six month program was found to be effective in reducing the foreign soundingness of the speech of foreign students who participated. Foreign students who did not participate had a significantly smaller reduction.—*D. Lebo.*

2851. Maltzman, Irving; Morrisett, Lloyd, & Brooks, Lloyd O. An investigation of phonetic symbolism. *J. abnorm. soc. Psychol.*, 1956, 53, 249-251.—Investigations concerning the accuracy of matching English words with their foreign equivalents showed that English could be matched with both the Japanese and Croatian equivalents at a level beyond chance expectancy. However, the correct equivalents among Japanese and Croatian word pairs were not matched at a significant level. "The latter finding was interpreted as being contrary to the hypothesis of the gestalt organization of trace systems, and the related hypotheses of phonetic symbolism and physiognomic language."—*A. S. Tamkin.*

2852. Miller, Elmo E. Context in the perception of sentences. *Amer. J. Psychol.*, 1956, 69, 653-654.—Tachistoscopic exposure of 50 sentences given once in a meaningful and again in a random order to 16 Os yield results indicating that "perception of sentences is facilitated" when given in the former order.—*R. H. Waters.*

2853. Morrison, Helen Miner, & Black, John W. Prediction of missing words in sentences. *J. Speech Dis.*, 1957, 22, 236-240.—From 1 to 6 words were omitted from each of 130 sentences and presented to over 700 college and graduate students. The remaining portions of the sentences both with and without indications of where words had been deleted and with the residual words both in original sequence and in scrambled order were presented to these subjects. The responses to single-word deletions were approximately 50% correct when the stimulus words were ordered as in the original. 75% of the reconstructed sentences were judged to convey the same idea as the original sentences. Proportion of correct responses, both correct words and sentences, diminished as additional words were deleted and as randomization was introduced into the order of the stimulus.—*M. F. Palmer.*

2854. Ochiai, Y., & Fukumura, T. On the fundamental qualities of speech in communication. *J. acoust. Soc. Amer.*, 1957, 29, 392-393.—Recent experiments by the authors on voice quality and articulation are reviewed.—*J. Pollack.*

2855. Pearlin, Leonard Irving. The social and psychological setting of communications behavior: An analysis of television viewing. *Dissertation Abstr.*, 1957, 17, 1142-1143.—Abstract.

2856. Postman, Leo, & Rosenzweig, Mark R. Perceptual recognition of words. *J. Speech Dis.*, 1957, 22, 245-253.—In a recent experiment 3-letter English words were used as stimuli, chosen according to how they represent different frequencies of usage in English and frequencies of occurrence of particular 3-letter combinations. Verbal habits determine recognition thresholds. When words are presented rapidly at low illumination, only a fragment of the stimulus pattern is likely to be discriminated. The relative frequency determines the alternative verbal responses. Experiments with constructive nonsense syllable words verified these results. After auditory and visual training, a further experiment was conducted with the auditory test showing larger effects of training. The recognition of verbal stimuli is influenced to an important degree by the verbal habits of the perceiver. The speed at which an item is recognized depends on the frequency with which this item

has been discriminated and used in the past.—M. F. Palmer.

2857. Spilka, B. Visual and aural stimulation of the speaker in voice communication. *Psychol. Newsltr*, N. Y. U., 1957, 8, 57-60.—"The purpose of this investigation was to determine the extent to which talker intelligibility in noise is related to the amount of information provided the talker by using the visual auditory sensory channels. It was demonstrated that visual presentation of speaker material produced the highest intelligibility scores, while the condition of auditory presentation without any additional cues resulted in the lowest scores. It was also noted that individual differences among the speakers were accentuated as the amount of information provided the speaker was decreased."—M. S. Maysner.

2858. Spitz, Rene A. No and yes: On the genesis of human communication. New York: International Universities Press, 1957. 170 p. \$4.00.—Archaic cephalogyric motor patterns, which are already available at birth, are used in conveying the concepts of "No" and "Yes" by gesture. At three months head-nodding is activated. These motor patterns insure survival in the need-gratificatory process of earliest nutrition (sucking). "The attribution of semantic meaning to the motor pattern, however, is brought about by a developmental process, by interchanges in the framework of object relations. Semantic gesture and word can only be evolved when the interaction between object relations and endopsychic energy displacements forces a specific change in the structure of the ego. The realignment in the ego takes the form of the defense mechanism of identification with the aggressor."—D. E. Meister.

2859. Tamminen, Armas Wayne. An evaluation of changes in parents' attitudes toward parent-child relationships occurring during a televised program of parent panel discussions. *Dissertation Abstr.*, 1957, 17, 1268-1269.—Abstract.

2860. Westley, Bruce H., & MacLean, Malcolm S. A conceptual model for communications research. *Journalism Quart.*, 1957, 34, 31-38.—"The principal elements in the model are: (1) a personality or social system engaged in selecting and transmitting messages purposively; (2) a personality or social system requiring and using communications about the condition of its environment for the satisfaction of its needs; (3) agents . . . in selecting and transmitting nonpurposively the information" . . . (required). Other elements are: feedback; encoding and decoding processes and channels by which messages are moved.—D. E. Meister.

(See also Abstracts 2279, 2667, 2977, 3030, 3211, 3276, 3284)

CLINICAL PSYCHOLOGY, GUIDANCE, & COUNSELING

2861. Kety, Seymour. Recent studies in psychopharmacology. *A.M.A. Arch. Neurol. Psychiat.*, 1957, 77, 278-279.—Abstract and discussion.

(See also Abstract 3258)

METHODOLOGY, TECHNIQUES

2862. Allerton, William S., & Peterson, Donald B. Preventive psychiatry—the army's mental hy-

giene consultation service (MHCS) program with statistical evaluation. *Amer. J. Psychiat.*, 1957, 113, 788-794.—Some of the benefits are discussed that were derived from the Mental Hygiene Consultation Service Program maintained and expanded since the Korean conflict.—N. H. Pronko.

2863. Beatman, Frances Levinson. Family interaction: Its significance for diagnosis and treatment. *Soc. Casewk*, 1957, 38, 111-118.—Through the use of a case history the author describes how the interactive patterns within a family are related to the diagnosis and treatment of personality problems. According to the author what the pattern of family interaction is determined where the first treatment focus should be, i.e., on the marital relationships, on the members' extra-family roles, or on the individual problems.—L. B. Costin.

2864. Bletzer, Russell R. The minister as counselor. *Pastoral Psychol.*, 1957, 8(72), 28-34.—The "minister becomes a counselor by virtue of his profession," but he is not "an ecclesiastical psychiatrist." His task is to listen and reflect feeling, sometimes to refer, and then to support. "The desire to help people through counseling, and to understand them through the insights of depth psychology, enriches our ministry."—A. Eglash.

2865. Blumenthal, Erik. Schulschriften der Verschiedenen Länder. (Samples of school script from different countries.) *Beih. Schweiz. Z. Psychol. Anwend.*, 1957, No. 31, 1-116.—For reference purposes in graphological analysis, the author discusses and illustrates the characteristics of handwriting as taught in 46 countries, all using latin script and alphabet.—H. P. David.

2866. Colliander, Carin, & Amark, Curt. A family counselling clinic, its working methods and results. *Acta psychiat.*, Kbh., 1956, Suppl. 106, 158-171.—The distribution of families into problem groups, the methods and results of treatment and the results for cases in which only one partner visited the clinic are presented. Infidelity, jealousy, sexual problems, pending divorce, incompatibility, mental disease and economic problems are dealt with. The results for long-term cases, or of social or psychological counseling in information cases, and in single interview cases are listed separately.—R. Kaelbling.

2867. Cyvin, K., Jørstad, J., & Retterstøl, N. Sympathicomimetics as diagnostic tests in psychiatry. *Acta psychiat.*, Kbh., 1956, Suppl. 106, 206-220.—0.5 mgm per kg body weight of acetylcholine is first injected i.v., then 20-30 minutes later adrenaline (0.5 mcg per kg body weight). Blood pressure is registered intra-arterially, because ordinary measurements fail to show the rapid variations that occur. According to their reaction to this choline-adrenaline test, patients are divided in 9 groups, which are compared with groups established by other authors. The diagnostic importance seems doubtful, but the test may probably give indication for psychiatric therapy. 37 references.—R. Kaelbling.

2868. Grinker, Roy R., Sabshin, Melvin; Hamburg, David A., Board, Francis A., Basowitz, Harold; Korchin, Sheldon J., Persky, Harold, & Chevalier, Jacques A. The use of an anxiety-producing interview and its meaning to the subject. *A.M.A. Arch. Neurol. Psychiat.*, 1957, 77, 406-419.—"The original intent involved an attempt to

produce stepwise augmentation of anxiety responses over 3 experimental days . . . in subjects actually anxious or anxiety-prone. In actuality, no such gradations in responses developed, and it became apparent that the stressor-patient relationship was more complex than was originally realized." The methods used by the interviewer and the defenses exhibited by the subjects are discussed and then illustrated in 8 "vignettes." It is concluded that the results "highlight difficulties encountered in making the anxiety-stimulus interview effective, in controlling its severity, and in quantifying it in a life situation."—*L. A. Pennington.*

2869. **Haffter, C.** *Kinderpsychiatrische Abteilung im Kinderspital Basel.* (The child psychiatric unit of the Basle children's hospital.) *Prax. Kinderpsychol. Kinderpsychiat.*, 1957, 6, 24.—The child psychiatric unit of the Basle children's hospital was established in January, 1956. Its capacity is 16 children and adolescents up to the age of 18. There is also an out-patient clinic. A report of activities is presented.—*E. Scherwin.*

2870. **Jones, Austin.** Sexual symbolism and the variables of sex and personality integration. *J. abnorm. soc. Psychol.*, 1956, 53, 187-190.—The purpose was to reassess the hypothesis of sexual symbolism using stimulus figures similar to those presented in Levy's study (see 28: 8696). The hypotheses were: (1) when asked to designate stimulus objects as male or female, Ss respond to elongated, pointed, or penetrating objects as male, and to hollow, rounded, or enclosing objects as female; and (2) psychiatric patients identify these objects as male or female, respectively, less frequently than nonpsychiatric patients. 20 psychiatric patients and 20 college students, each group made up of an equal number of males and females, served as Ss. Both hypotheses were confirmed at significant levels.—*A. S. Tamkin.*

2871. **Kounin, Jacob; Polansky, Norman; Bidde, Bruce; Coburn, Herbert, & Fenn, Augustus.** Experimental studies of clients' reactions to initial interviews. *Hum. Relat.*, 1956, 9, 265-293.—The three experiments upon which this report is based derive from the earlier field study reported in the same journal. By means of role playing a relationship-centered versus a problem-centered style of interviewing were compared. In general, relationship oriented interviews were more favorably received. The reactions to the two different interview styles were analyzed with respect to personality differences and expectations in observers as well as the kind of relationship between participants vis a vis power. Findings are summarized in a set of eleven statements.—*R. A. Littman.*

2872. **MacLeod, A. W., Silverman, B., & Poland, Phyllis.** The well-being Clinic: A study of the effectiveness of an attempt to provide routine mental health check-ups for community groups. *Amer. J. Psychiat.*, 1957, 113, 795-800.—A Well-Being Clinic has been in operation for the past 2 years at McGill University. This preliminary report furnishes details about its development and its manner of operation and summarizes results to date and discusses basic assumptions underlying its conception.—*N. H. Pronko.*

2873. **Mangus, A. R.** Role theory and marriage counseling. *Soc. Forces*, 1957, 35, 200-209.—Mar-

riage and family counseling must "be socially based on a valid theory of personality and behavior." It is felt that role theory provides such a base both for practice and for research in this area.—*A. R. Howard.*

2874. **Marfatia, J. C., & Batiwalla, B. M.** Mental health services and the five year plan in India. *Int. J. soc. Psychiat.*, 1956, 2, 58-61.—Review mental health services under the 5 year plan in India and find that only in serious mental illness is there adequate services. Little attention is paid to less serious mental disorders and preventive measures are almost non-existent. The most significant measures in mental health have been the planned parenthood program and the teaching of mental hygiene in the universities.—*R. M. Frumkin.*

2875. **Payne, R. W.** Experimental method in clinical psychological practice. *J. ment. Sci.*, 1957, 103, 189-196.—Despite the great amount of time involved the only accurate way to study the problems of the patient is by experiments, and even if the experiments are inadequate they turn up some facts useful in rehabilitation or treatment.—*W. L. Wilkins.*

2876. **Phillips, Jeanne Shirley.** The relationship between two measures of interview behavior comparing verbal content and verbal temporal patterns of interaction. *Dissertation Abstr.*, 1957, 17, 898.—Abstract.

2877. **Polansky, Norman, & Kounin, Jacob S.** Clients' reactions to initial interviews: A field study. *Hum. Relat.*, 1956, 9, 237-264.—The data for this study were obtained for a sample of 150 clients who had interviews with professional helping persons. These interviews . . . were conducted immediately after the client had left an interview that was his first contact with the helping person. In each case, the client had come for help with a problem of some sort on his own volition." Interviews and a forced-choice questionnaire were used. Data were analyzed in accordance with a paradigm presented. The study is considered by the authors to be primarily exploratory.—*R. A. Littman.*

2878. **Riday, George Emil.** A comparative study of the counseling methods employed by the graduates of Andover Newton Theological School and Eastern Baptist Theological Seminary. *Dissertation Abstr.*, 1957, 17, 1257-1258.—Abstract.

2879. **Skottowe, Ian.** A mental health handbook. Baltimore: Williams and Wilkins, 1957. (London: Edward Arnold.) vii, 196 p. \$5.50.—A survey of the mental health services currently operating in Great Britain is presented. The national needs, the legal aspects, and the organizational problems are discussed in detail.—*L. A. Pennington.*

2880. **Tatarenko, N. P.** O znachenii issledovaniia orientirovochnogo refleksa v psikiatricheskoi klinike. (On the significance of study of the orienting reflex in the psychiatric clinic.) *Zh. vyssh. nervn. Deiatel.*, 1956, 6, 360-364.—Study of the orienting reaction and in particular its pupillary component is useful for analyzing various pathological states in the psychiatric clinic.—*I. D. London.*

2881. **Whitla, Dean Kay.** An evaluation of differential prediction for counseling and guidance. *Dissertation Abstr.*, 1957, 17, 1269-1270.—Abstract.

(See also Abstracts 2755, 2983, 3013, 3079, 3082, 3102, 3121, 3192)

DIAGNOSIS & EVALUATION

2882. Aaronson, Bernard S. **The Porteus Mazes and Bender Gestalt recall.** *J. clin. Psychol.*, 1957, 13, 186-187.—"A comparison of Porteus Maze scores and the number of Bender figures recalled by a sample of epileptic subjects with a high incidence of feeble-mindedness suggests a moderate correlation of .46 between these two variables, which shrinks to .21 when the effect of age is held constant. These data suggest that there is no practical relationship between recall of Bender figures and intelligence." The 104 male and female Ss varied in age from 12 to 72, in Porteus quotient from 20 to 123.—L. B. Heathers.

2883. Badaracco, Juan Carlos García. **Sobre el valor diagnóstico y pronóstico del test de Rorschach.** (On the diagnostic and prognostic value of the Rorschach test.) *Acta neuropsiquiat. Argent.*, 1956, 2, 409-414.—The evaluation of a Rorschach test administered concurrently with a psychiatric examination led to the diagnosis of "a very primitive personality with little ethical feeling"—a psychopathic configuration. Although the Rorschach prognosis was unfavorable, the patient was released. Her subsequent amoral behavior amply fulfilled the Rorschach predictions. The author believes the Rorschach to be a valid instrument, "especially as an implement to the general examination."—L. G. Datta.

2884. Bard, Morton, & Waxenberg, Sheldon E. **Relationship of Cornell Medical Index responses to postsurgical invalidism.** *J. clin. Psychol.*, 1957, 13, 151-153.—The CMI was given 19 women pre and post radical mastectomy; they were also intensively interviewed pre and post surgery. Dependency ratings were made prior to, invalidism ratings subsequent to therapy. Scores on the Physical Symptoms section dropped after surgery, but those on the General Medical and Mood and Feeling sections changed little. None of the CMI scores were related to dependency ratings, but there were significant correlations, from both testings, with invalidism except on the Mood and Feeling section. However, neither pre nor post cut off scores effectively differentiated the more invalid cases.—L. B. Heathers.

2885. Barry, John R. **A further study of the McKinney Reporting Test scores.** *J. abnorm. soc. Psychol.*, 1956, 53, 258-260.—The McKinney Test was given to 371 first pilots and 428 copilots prior to beginning B-29 Combat Crew Training. Various criteria were used by psychologists to make over-all ratings of adjustment. 2 extreme criterion groups of 200 Ss each were then selected to define the maximum adjustment differences in the population. It was predicted that the upper criterion group members could perform on the McKinney Test at a more consistent rate and would be less susceptible to the frustrating conditions. The differences between the criterion groups were in the predicted direction and statistically significant for only 5 of the 18 possible comparisons. Lack of agreement with the Douglass-Brown study suggests that the measures of frustration reaction reflected by both sets of data are unstable.—A. S. Tamkin.

2886. Baumgarten F. **Beispiel einer Prüfung mit den evokativen Tests.** (Example of an examination with evocative tests.) *Mensch u. Arbeit*, 1957, 9(1/2), 1-13.—A 27-year-old elementary school teacher with a conflict over additional professional

training was helped to gain insight into her potential aptitude and vocational preference by the use of several projective paper and pencil tests. These "evocative" tests, developed in Switzerland, make use of proverbs, choice of book titles, and ambiguous pictures for evoking meaningful responses about vocational interests and attitudes of the subject tested.—E. Schwerin.

2887. Bingham, Joseph Leo. **Personality projection through picture interpretation as a function of physical and situational ambiguity.** *Dissertation Abstr.*, 1957, 17, 1379.—Abstract.

2888. Callahan, Roger J., & Keller, James E. **Digit span and anxiety: An experimental group revisited.** *Amer. J. ment. Defic.*, 1957, 61, 581-582.—Children with low digit span scores tended to perceive more threatening objects in the ambiguous stimuli of the Children's Anxiety Pictures than did those with high digit span scores. This technique seems to measure the kind of anxiety that interferes with attention.—V. M. Staudt.

2889. Cline, Victor B., Forgy, Edward; Egbert, Robert, & Meeland, Tor. **Reactions of men under stress to a picture projective test.** *J. clin. Psychol.*, 1957, 13, 141-144.—"Near the close of the Korean War 310 fighters and nonfighters were given a week's assessment. This involved administering 86 separate tests and procedures one of which was a TAT-like picture projective test. Using a special scoring system, four psychologists independently analyzed 100 test protocols. Fair rater agreement was obtained with the median interrater correlation being .72. However differences between fighters and nonfighters were only at the chance level . . . the fighter group was composed of men who had functioned exceptionally well under stress. The nonfighters tended . . . to be men who had collapsed and/or panicked under the strain. . . ." The test consisted of six drawings developed for this study.—L. B. Heathers.

2890. David, Henry P., & Leach, Walter W. **The projective question: Further exploratory studies.** *J. proj. Tech.*, 1957, 21, 3-9.—"The Projective Question is a brief, unstructured, verbal item, designed to apply the general principles of projective techniques to the study of personality. This paper is a continuation of an earlier one (see 30: 4561). It presents more extensive methods of administration and classifying choice and theme categories. Also reported are further normative and exploratory studies, an illustrative PQ protocol, and a continued discussion of implications for clinical evaluation and personality dynamics." 16 references.—A. R. Jensen.

2891. Davids, Anthony; Joelson, Mark, & McArthur, Charles. **Rorschach and TAT indices of homosexuality in overt homosexuals, neurotics, and normal males.** *J. abnorm. soc. Psychol.*, 1956, 53, 161-172.—Rorschach and TAT protocols of 20 male overt homosexuals, 20 male neurotics, and 20 normal male students were compared in order to determine whether proposed homosexual signs were discriminative. The homosexual group gave a significantly greater mean number of the Rorschach and TAT signs than did either nonhomosexual group. "Within the homosexual group, correlation between the number of Rorschach signs and number of TAT signs produced by each S proved significant, serving as a check on the validity of both schemes and in-

dicating the consistency of these 2 diverse measures of homosexuality."—A. S. Tamkin.

2892. Eckhardt, William. Stimulus determinants of "shading" responses. *J. clin. Psychol.*, 1957, 13, 172-173.—10 Rorschach popular details were reproduced to form 3 card sets. The first set reproduced the original; the second had only 2 tones of gray; the third set was reproduced as a monotone. The cards were presented in a set order to 20 normal Ss, mostly college students, aged 16-25. Achromatic color and orthodox vista responses occurred equally frequently on all sets; it was inferred these responses were due to overall intensity since only this variable was common to all card sets. Texture responses, diffuse movement and vista responses occurred on the first set only. Transparency and toned-down depth responses occurred on the first two sets but not at all on the third set; it was inferred these were then due to brightness contrast. The monotone and two-toned cards were perceived as dead, "suggesting that 'gruesome' responses were determined by the darker degrees of overall intensity."—L. B. Heathers.

2893. Enke, H. Die Präformation der Symptomwahl im Körperschema Gesunder. (The preformation of symptom choice in the body schema of healthy persons.) *Z. Psychother. med. Psychol.*, 1957, 7, 67-79.—To what extent do persons agree in associating specific kinds of organ illness with different kinds of basic emotional conflict? To answer this question, a projective-type questionnaire was constructed, asking for the kinds of organ disorder that would befall a "hero" in 8 different basic anxiety situations. From 341 usable questionnaires it was evident that consensuses of agreement between specific organ disorders and different kinds of emotional conflict followed the lines of popular thinking, for example, love-heart, gall-irritation, envy-jaundice, etc. 51 references.—E. W. Eng.

2894. Goldberg, Franklin H. The performance of schizophrenic, retarded, and normal children on the Bender-Gestalt test. *Amer. J. ment. Defic.*, 1957, 61, 548-555.—"The purpose of this study was to determine whether there were any significant differences between the performances of schizophrenic, mentally retarded and normal children on the Bender-Gestalt Test as measured by the Fascal and Suttell scoring system. Secondly, qualitative factors which seem to be typical of a particular group were reported." Three groups—schizophrenic, retarded and normal children—composed of 15 white male children were studied. A significant difference in performance was observed between the normal and both schizophrenic and retarded groups. The difference between the latter two groups approached but did not reach significance. Emotional factors seem to have an effect on the Bender-Gestalt score, the schizophrenics needing a significantly longer time to copy the figures than the normals or retardates.—V. M. Staudt.

2895. Goldstein, Arnold P., & Rawn, Moss L. The validity of interpretive signs of aggression in the drawing of the human figure. *J. clin. Psychol.*, 1957, 13, 169-171.—The effects of experimentally induced feelings of aggression interpolated between two figure drawings presentations were studied in terms of four variables: line pressure, figure size, a group of seven specific drawing details, and overall

subjective judgments of aggression. Of these four variables hypothesized to be related to aggression, only the seven specific drawing details, as a group, did in fact relate to aggression." The two psychologists who made the over-all judgments reported placing primary emphasis on line pressure and figure size. Ss showed and reported hostility feelings under the lifelike hostility instigating conditions. Ss were 39 male and female mental hospital attendants divided into a C and an E group.—L. B. Heathers.

2896. Halpern, Howard M. A Rorschach interview technique: Clinical validation of the examiner's hypotheses. *J. proj. Tech.*, 1957, 21, 10-17.—The author describes a method for testing the Rorschach examiner's hypotheses about the meaning of the responses. The technique consists of administering the Rorschach, allowing an interval during which the examiner carefully reviews the responses and creates hypotheses about the dynamic well-springs of each percept. These hypotheses are then converted into questions that are asked directly of the patient. The construction of suitable questions is discussed and a case illustration is given.—A. R. Jensen.

2897. Jackson, Douglas N. A short form of Witkin's Embedded-figures Test. *J. abnorm. soc. Psychol.*, 1956, 53, 254-255.—A short form of Witkin's Embedded-figures Test is presented as a good alternative to the longer form which sometimes may require more than an hour and a half for its administration. The short form correlates .99 with the entire scale, based upon a sample of 50 college students. "It thus appears that the 12-item short form with a 3-minute limit gives a very good approximation of results obtained from the entire Witkin embedded-figures test while requiring only half as much administration time."—A. S. Tamkin.

2898. Johnston, Robert A. A methodological analysis of several revised forms of the Iowa Picture Interpretation Test. *J. Pers.*, 1957, 25, 283-293.—The IPIT was developed in an effort to provide an objective and useful measure of variables presumed to affect behavior: achievement imagery (AI), insecurity (I), blandness (B), and hostility (H). Three forms of this test have been developed, O, RK, and RT. It was concluded from the study that Form RK is a more useful measure of AI than are the other two.—M. O. Wilson.

2899. Kahn, T. C. The Kahn Test of Symbol Arrangement: Clinical Manual. *Percept. Mot. Skills*, 1957, 7, 97-168.—Ten years of research with the KTSA is presented in detail and the clinical use of the test discussed. Norms for interpretation of test results are presented. Examples of interpretation are given.—C. H. Ammons.

2900. Karson, Samuel, & Sells, Saul B. Comments on Meehl and Rosen's paper. *Psychol. Bull.*, 1956, 53, 335-337.—In a paper by Meehl and Rosen (see 30: 2902) a rationale for evaluating the predictive efficiency of psychometric instruments is presented. The purpose of this paper is to emphasize the importance of administrative policy in any consideration of statistical criteria. A discussion of Meehl and Rosen's Case 1 situation is presented.—W. J. Meyer.

2901. Kaufman, M. Ralph, & Bernstein, Stanley. A psychiatric evaluation of the problem patients: Study of a thousand cases from a consultation service. *J. Amer. med. Ass.*, 1957, 163, 108-111.—

After all organic factors could be eliminated, in 81.4% of these diagnostic problems the patients were found to have psychological factors as the basis for their complaints and illnesses. Only 16.6% had organic illness as the sole etiological factor. Emotional illness can and should be a positive diagnosis, not one of exclusion.

2902. Kimber, J. A. Morris. **An alphabetical list of MMPI items.** *J. clin. Psychol.*, 1957, 13, 197-202.—MMPI items are listed alphabetically by their initial words. Their code and/or number identifications in the individual and group forms of the MMPI are indicated.—L. B. Heathers.

2903. Kornetsky, Conan, & Humphries, Ogretta. **Relationship between effects of a number of centrally acting drugs and personality.** *A.M.A. Arch. Neurol. Psychiat.*, 1957, 77, 325-327.—The hypothesis is developed that personality plays a role in determining the extent of drug effect. 10 volunteer subjects, 4 drugs (secobarbital, chlorpromazine, meperidine, and lysergic acid diethylamine), objective and subjective psychological tests, and 4 scales (Hysteria, Depression, Hypochondriasis, and Psychasthenia) from the Minnesota Multiphasic Personality Inventory were used. It was found that the Depression and Psychasthenia Scales "correlated significantly, or almost significantly, with the subjective effects and, to a less extent, with the objective effects of those drugs and dosages that produced significant effects."—L. A. Pennington.

2904. Lax, R. F. **An experimental investigation of the influence of color on the perception of movement in ink blots.** *Psychol. Newsltr. N. Y. U.*, 1957, 8, 61-75.—"Four ink blots in red, blue, green, and black-grey forming a series of 16, were presented to 30 college students matched in intelligence and ratio of men to women. Standard Rorschach procedure was observed. The findings indicate tentatively that color influences movement responses in a unique fashion for each personality." 19 references.—M. S. Mayzner.

2905. Levitt, Eugene E. **The water-jar Einstellung test as a measure of rigidity.** *Psychol. Bull.*, 1956, 53, 347-370.—"The primary purpose of the present paper is to examine the validity of the water-jar test as a rigidity measure by critically reviewing studies involving its use as such an index." Correlations between the water-jar test (WJT) and numerous criterion measures are generally statistically nonsignificant. On the basis of several studies it is tentatively concluded that a low negative correlation between the WJT and intelligence exists. The notion that rigidity increases under stress is not supported by the research evidence. The author concludes that evidence for the validity of the WJT is lacking and that the WJT, from a psychometric point of view, is poor. 59 references.—W. J. Meyer.

2906. Lieberman, Martha Glassman. **Childhood memories as a projective technique.** *J. proj. Tech.*, 1957, 21, 32-36.—The author's purpose was "to compare the type and amount of information yielded by the earliest childhood memories with a regular projective test battery consisting of the Wechsler-Bellevue, Rorschach, Bender-Gestalt and House-Tree-Person drawings. The results indicated that there was a significant similarity between the type of content obtained by using the two procedures, although quantity of in-

formation was more extensive on the test battery. Differences in type of content were also noted between the psychotic and non-psychotic groups but because of the limited sample falling within each content category, statistical analysis was not attempted. The advantages of utilizing childhood memories as a projective technique were the ease and rapidity of obtaining them as well as their function in serving as a check upon other projective materials." 17 references.—A. R. Jensen.

2907. Michaux, William W. **The Sentence Composition Test.** *J. clin. Psychol.*, 1957, 13, 174-175.—This new projective test requires the subject to write 20 sentences each containing the word "because." The protocol of a paranoid schizophrenic is presented to illustrate the test.—L. B. Heathers.

2908. Mindess, Harvey. **Psychological indices in the selection of student nurses.** *J. proj. Tech.*, 1957, 21, 37-39.—"A study was carried out using the Wechsler-Bellevue and Rorschach tests to predict success in nurses' training. From the results it appears that intelligence as measured by the Wechsler and ego-strength as estimated by the Rorschach Prognostic Rating Scale are significantly related to achievement in nurses' training. It would seem advisable for tests such as these to be employed more widely in the fields of vocational assessment and selection."—A. R. Jensen.

2909. Murakami, Eiji, & Emi, Yoshitoshi. **(A study of the Rorschach ranking test.)** *Jap. J. Psychol.*, 1956, 27, 185-192.—Eysenck's ranking method was substituted for the multiple choice method in using the group Rorschach with normals, schizophrenics, and delinquents. The 3 groups of Ss could be distinguished, with a high degree of reliability, at the 1% level. English abstract, p. 252-253.—J. Lyons.

2910. Murray, David C. **An investigation of the Rorschach white space response in an extratensive experience balance as a measure of outwardly directed opposition.** *J. proj. Tech.*, 1957, 21, 40-46.—"6 assumed measures of oppositional tendencies were given to 101 college students of both sexes, along with the individually administered Rorschach. The criterion measures were hypothesized to measure a variety of different types of opposition. Ss were divided into separate groups on the basis of S percent and E.B. (i.e., M:sum C)." The groups were compared by analysis of variance. The author concluded: "(1) S responses and outwardly directed oppositional tendencies, as measured by the 6 criterion measures used, are not related for the population sample tested; (2) Extratensive EB and outwardly directed oppositional tendencies . . . are not related . . . (3) The use of S in an extratensive EB is not indicative of outwardly directed oppositional tendencies, as these are measured by six criterion measures, with the population tested." 33 references.—A. R. Jensen.

2911. Murray, David C. **White space on the Rorschach: Interpretation and validity.** *J. proj. Tech.*, 1957, 21, 47-53.—The author reviews the theoretical and research literature on the interpretations of the Rorschach S (white space) response, both as they apply to S per se and as they apply to different diagnostic categories. "It was concluded that all present studies have weaknesses which prevent their

being definitive, and that while no studies to date suggest that any of the interpretations are sufficiently valid insofar as the individual Rorschach record is concerned, the weaknesses in present studies prevent this judgment from being final. Very few of the many suggested interpretations have yet been tested." 38 references.—A. R. Jensen.

2912. Niebuhr, Herman, Jr., & Cohen, David. **The effect of psychopathology on visual discrimination.** *J. abnorm. soc. Psychol.*, 1956, 53, 173-177. —"Perceptual and motor aspects of the Bender-Gestalt Test performance were compared for 4 groups of Ss: 10 student nurses, 10 acute schizophrenic patients, 10 chronic schizophrenic patients, and 10 patients hospitalized for neurological reasons. . . . After the Ss had obtained equal experiences with the Bender designs by reproducing them under memory and copy conditions, a perceptual multiple-choice test was administered under memory and matching conditions. Results indicate that there are marked differences in perceptual accuracy between the 4 groups: the control population was most accurate, with the acute schizophrenic, chronic schizophrenic, and neurological patients less proficient in that order."—A. S. Tamkin.

2913. Niimi, Yosizumi; Hashimoto, Hitoshi; Mochizuki, Kazuyasu, & Ohno, Ikuko. (Galvanic skin responses during Rorschach test administration.) *Jap. J. Psychol.*, 1956, 27, 175-184.—Psychotics, as compared with normals, showed marked increases in GSR to cards VI-X, differences that did not appear when non-Rorschach color stimuli were used. The position of the Rorschach card in the series was also found to be a significant factor. English abstract, p. 251-252.—J. Lyons.

2914. O'Connor, James P., Stefic, Edward C., & Gresock, Clement J. **Some patterns of depression.** *J. clin. Psychol.*, 1957, 13, 122-125.—"The items of the MMPI depression scale were intercorrelated (r_t) over a population of 300 white, male, veteran, neuropsychiatric hospital patients of mixed diagnoses and the resulting matrix was factored and rotated obliquely to simple structure. The five factors which were isolated were identified as hypochondriasis, cycloid tendency, hostility, inferiority, and depression. Three second-order factors were extracted, but only one, depression, could be identified with any degree of certainty. The results indicate the multidimensionality of the D scale and call into question the practice of attributing to the scale a simple unitary significance." 19 references.—I. B. Heathers.

2915. Pope, Benjamin, & Jensen, Arthur R. **The Rorschach as an index of pathological thinking.** *J. proj. Tech.*, 1957, 21, 54-62.—A Rorschach Index of Pathological Thinking, based on Rapaport's classification of aberrant verbalizations on the Rorschach, was investigated with respect to its reliability and its validity against the criterion of observed clinical changes in schizophrenic patients. Rorschachs were obtained on a group of patients before and after three months of insulin coma treatment, ECT, and routine hospital care: (1) Rater reliability for total Index score was high; (2) Changes in the Index were not significantly correlated with psychiatric ratings of changes; (3) Index scores showed a significant lowering (decrease in pathological thinking) over the period of hospitalization covered by this study. 16 references.—A. R. Jensen.

2916. Primac, Daniel W., Mirsky, Allan F., & Rosvold, H. Enger. **Effects of centrally acting drugs on two tests of brain damage.** *A.M.A. Arch. Neurol. Psychiat.*, 1957, 77, 328-332.—By use of the 10 Ss given low and high dosages of 1 of 4 drugs or a placebo, who were required to take the Continuous Performance Test and the Wisconsin Card Sorting Test, it was found that chlorpromazine alone significantly altered (lowered) test performances (Continuous Performance Test only). This deficit increased as drug dosage increased. The significance of this finding is discussed along with the problem of testing Ss at the time of a drug's "peak effect." 24 references.—L. A. Pennington.

2917. Rigal, J., Schnetzler, J. P., & Dutertre, F. **Contribution à l'étude du test du village.** (Contribution to the study of the Village Test.) *Ann. méd. psychol.*, 1956, 2(4), 576-597.—First conceived by Van Lennep, the Village Test has been used by French psychologists as a projective technique. The manner in which the subject chooses buildings, trees and houses, and organizes them as a community reveals many of his attitudes and conflicts. Case histories serving as illustrations are given.—M. D. Stein.

2918. Rockett, Frederick C. **Speed of form recognition as a function of stimulus factors and test anxiety.** *J. abnorm. soc. Psychol.*, 1956, 53, 197-202.—This study evaluated the usefulness of several theories about Rorschach color shock. Using an arabic-greco-latin square design, the influence of color, pattern of color, figure, and anxiety level on response time was investigated in 192 Ss. "The influence on response time of stimulus attributes affecting complexity was confirmed. The hypotheses that highly anxious persons are greatly affected by colors are not confirmed. Partially verified were predictions made from Hullian behavior theory. It was found that drive level and figure difficulty were related to response time in that highly anxious persons became slower with increasing difficulty of figure during warm-up trials. During the test series, however, the predicted relationship was not found."—A. S. Tamkin.

2919. Rodgers, David A. **Sources of variance in students' Rorschach interpretations.** *J. proj. Tech.*, 1957, 21, 63-68.—"The study attempted to identify the relevant sources and amounts of variance of Rorschach interpretations made from blind protocols, by students just learning the technique. Course training was found to have a significant but small influence on the interpretations. The protocols themselves accounted for approximately one-fifth of the probable raw score variance. Individual differences in interpretation of protocols accounted for only slightly less variance. Unaccounted for, or error, variance was found to make up over half of the probable raw score variance. Stereotypy of interpretation, independent of the particular protocols being assessed, was not found."—A. R. Jensen.

2920. Shah, Saleem Alam. **Use of the inspection Rorschach technique in analyzing missionary success and failure.** *J. proj. Tech.*, 1957, 21, 69-72.—The Rorschachs of 206 American missionaries in the foreign field who had been rated as "successful" or "unsuccessful" in their field work were compared, using Munroe's Inspection Rorschach Technique. No significant differences were found between "successful" and "unsuccessful" missionaries.—A. R. Jensen.

2921. Sopchak, Andrew L. Relation between MMPI scores and musical projective test scores. *J. clin. Psychol.*, 1957, 13, 165-168.—"Four hundred and fifty subjects were administered the group form of the MMPI. . . . During a later laboratory period, the same subjects listened to fifteen selected recordings. They were asked to check as many descriptive terms as they felt could describe the music. The total number of checks made by each subject for all fifteen records for each of the twelve categories was counted and gave twelve 'music feeling' scores for each subject. These scores were correlated with each of the nine personality scores separately for the sexes." These correlations are discussed. In general, even the significant *r*'s are low, are not consistent for males and females.—L. B. Heathers.

2922. Stewart, Ursula; Leland, Lorraine, & Streiter, Edith. Mosaic patterns of eighth grade children. *J. proj. Tech.*, 1957, 21, 73-79.—A study of the mosaic patterns of 125 eighth grade children revealed a "predominance of representational as opposed to abstract designs, with houses and buildings constituting the major sub-classification. However, we note at this age a greater tendency to abstract designs than found previously; the appearance of the cruciform and winged pattern; the use of perspective; and, among brighter children, the ability to integrate ideas on a high level. Definite sex differences were found as well as cultural differences between the Americans and English. The mosaic also proved to be of predictive value in the hands of a skilled worker."—A. R. Jensen.

2923. Tamkin, Arthur S. An evaluation of the construct validity of Barron's Ego-Strength Scale. *J. clin. Psychol.*, 1957, 13, 156-158.—Es scores were correlated with Rorschach F + %, the Bender-Gestalt, MMPI F and Critical Item (CI) scores. Ss were 30 male VA mental hospital patients most of whom were seen on routine admission evaluations. Half of the Ss were psychotics; half, neurotics and personality disorders. Es score was not significantly correlated with F + % or the Bender nor were these two latter measures related. As expected F and CI were highly correlated and both were significantly negatively correlated with Es. Only F and CI differentiated significantly between the psychotics and non-psychotics.—L. B. Heathers.

2924. Tolor, Alexander. The stability of tree drawings as related to several Rorschach signs of rigidity. *J. clin. Psychol.*, 1957, 13, 162-164.—To test whether the stability of scores on the tree drawing was related to rigidity, 61—all male but four—consecutive patients referred for psychological testing were given this test and the Rorschach. They were asked to draw the tree twice with instructions to make the second drawing as different as possible from the first. Drawings were evaluated by two methods: they were (1) scored quantitatively on various defined features and (2) rated for rigidity on the basis of over-all clinical judgments. Extreme groups—N's of 14 for method 1, of 16 and 17 for method 2—were then selected; these groups overlapped only about 50%. The only one of the approximately 12 variables studied that showed a significant difference was R for method 1. Several other differences which did not reach statistical significance were in the expected direction.—L. B. Heathers.

2925. Tolor, Alexander. Structural properties of Bender-Gestalt Test Associations. *J. clin. Psychol.*, 1957, 13, 176-178.—"Fifty neuropsychiatric patients were requested to associate to each of the nine Bender-Gestalt Test designs. The various types of responses offered were classified in an attempt to explore the formal or structural properties of these associations. Significant differences were obtained in the frequency with which each type of response was elicited by the nine designs." The categories used to classify the responses are presented.—L. B. Heathers.

2926. Tomkins, Silvan S., & Miner, John B. The Tomkins-Horn Picture Arrangement Test. New York: Springer, 1957. xvi, 383 p. \$10.00.—This is a detailed and current manual to accompany the PAT. The text contains the history and rationale of the test and description of test procedures and results. Scoring, keys, and interpretive methodology are discussed. The major portion of the manual is devoted to plate and pattern norms. The appendix includes directions on manual and machine scoring and a reproduction of the PAT plates. The authors state that the test has been found to be useful "in the diagnosis of normal personalities for vocational counseling, personnel selection, and guidance, as well as in the diagnosis of neurotics and psychotics."—B. H. Light.

2927. Tycko, Milicent. Rorschach response as a function of exposure time. *Dissertation Abstr.*, 1957, 17, 899.—Abstract.

2928. Ullmann, Leonard P., & McFarland, Robert L. Productivity as a variable in TAT protocols—a methodological study. *J. proj. Tech.*, 1957, 21, 80-87.—"The average number of words and the average number of emotional words per TAT card for two samples of VA neuropsychiatric patients were related to ratings of the Ss on the Palo Alto Group Therapy Scale, a measure of adequacy of interpersonal relationships. Independent estimates of the Group Therapy Scale ratings were made from the TAT protocols by skilled clinicians. . . . There was no indication that the clinicians . . . predicted the present criterion significantly better than the score of the amount of material produced by the Ss." There was a statistically significant positive relationship between number of words per TAT picture and scores on the Group Therapy Scale. 22 references.—A. R. Jensen.

2929. Wagner, Frederik F. The Interpersonal Relationship Test (IRT): A suggested picture device for the evaluation of initial attitudes towards individual psychotherapy and hypnotic induction. *J. clin. exp. Hypnosis*, 1956, 4, 99-108.—Describes a TAT-like test used to obtain knowledge of S's, "interpersonal relationship pattern, his attitude toward hypnosis, and his preference as to the physical structure in such situations." An illustrative case is presented.—S. Fisher.

2930. Warshaw, Leon. The function of recall and choice as a projective device in normal, neurotic, and psychotic mental states. *Dissertation Abstr.*, 1957, 17, 900.—Abstract.

2931. Weisskopf-Joelson, Edith; Asher, E. J., Albrecht, Kenneth J., & Hoffman, Martin L. An experimental investigation of "label-avoidance" as a manifestation of repression. *J. proj. Tech.*, 1957, 21, 88-93.—Part of the California F scale, a

scale measuring conformity values, and a special projective technique of 15 pictures for measuring label-avoidance were administered to 113 male high school students. It was concluded from the relationships between certain measures that label-avoidance appears to be related to repression of aggression against the father. High F scores showed no association with label-avoidance." In conclusion, the findings of the present study lend some support to the hypothesis that people who repress their aggression against the father to an extreme degree tend to express this aggression in 'inappropriate' rather than in 'appropriate' situations, i.e., they tend to use label-avoidance as defined in this paper."—A. R. Jensen.

2932. Wertheimer, Rita R. Relationships between specific Rorschach variables and sociometric data. *J. proj. Tech.*, 1957, 21, 94-97.—The Rorschachs of 98 socially accepted and 102 socially rejected adolescents were compared on 5 Rorschach variables purported to be associated with social acceptance (H%, P%, FC>CF, Fc ("fact"), SC>M). No significant relationships were found between these Rorschach variables and social acceptance by others.—A. R. Jensen.

2933. Willner, Allen Eugene. The interpretation of the Rorschach Test as a function of interpreter, degree of information, and the subject's personality. *Dissertation Abstr.*, 1957, 17, 1385-1386.—Abstract.

(See also Abstracts 2278, 2736, 3019, 3038, 3083, 3167, 3189, 3203, 3222, 3234, 3235, 3248)

TREATMENT METHODS

2934. Alexander, Leo, & Moore, Merrill. Multiple therapy in private psychiatric practice. *Amer. J. Psychiat.*, 1957, 113, 815-823.—A combined psychic and somatic "multiple therapy" has been evolved which is here reported and discussed with illustrations from a series of 11 cases.—N. H. Pronko.

2935. Ament, Philip. The "as if" attitude in illusions of anesthetics with hypnosis. *J. Amer. Soc. psychosom. Dent.*, 1957, 4(2), 52-56.—The hypnotic induction procedure can be very comparable to psycho-drama in that characters can be rehearsed "to act 'as if' they were characters in a drama." If this attitude is induced in the patient, and the operator has an understanding of the effects of the anesthetics he informs the patient he wishes them to feel "as if" they had, "it has been possible to intensify the production of anesthesia from analgesia to more profound states. . . ." The taking of a good case history to avoid an emotional factor instigated by a memory of a previous traumatic experience, however, is emphasized.—J. H. Manhold, Jr.

2936. Anthony, E. J. Die psychotherapeutische Gruppenbehandlung von Kindern in verschiedenen Stadien ihrer Entwicklung. (Psycho-therapeutic group treatment of children in their various developmental stages.) *Prax. Kinderpsychol. Kinderpsychiat.*, 1957, 6, 15-20.—The following is discussed with respect to structure, process, and content of a group: 1. spontaneous development of a therapeutic group; 2. therapeutic group situations; 3. technique of treatment of the different developmental stages, such as small children, school children, and adolescents.—E. Schwerin.

2937. Ayd, Frank J., Jr. Chlorpromazine therapy for anxiety associated with electroshock therapy. *Conf. neurol.*, 1956, 16, 168-173.—The author concludes that chlorpromazine does not affect the intensity or duration of convulsions, nor does it prevent post-shock confusion and memory impairment. The drug was found more effective than the Reiter therapy in controlling post-shock anxiety and excitement. It also "reduces the number of electro-convulsive treatments required in hypomanic and manic reactions, catatonic excitements and agitated depressions, thereby lessening post-treatment confusion and memory impairment and leaving the patient more accessible to psychotherapy. . . . The physiologic action of chlorpromazine makes this drug ideal for combination with electro-convulsive therapy. As a sympathetic depressant it counteracts the excessive sympathetic stimulation that so often accompanies ECT."—M. L. Simmel.

2938. Bach, George R. Observations on transference and object relations in the light of group dynamics. *Int. J. group Psychother.*, 1957, 7, 64-76.—"Our patients improve their mental health through 'role maturation' which goes beyond insight into individual history and pathogenesis. The process of gaining and holding the respect of their peers in the therapeutic group seems to stimulate the reconstruction of personalities."—D. D. Raylesberg.

2939. Barajas Castro, Rafael. Analyse d'un rêve apporté au début d'un traitement. (Analysis of a dream submitted at the beginning of treatment.) *Rev. franç. Psychanal.*, 1957, 21, 5-21.—The first dream submitted in analysis is often of particular importance. A case is reported of a 27-year-old male suffering a sexual inhibition based on anxiety. The dream and subsequent analysis revealed the customary Oedipus block, treatment offering the usual alleviation.—G. Rubin-Rabson.

2940. Behymer, Alice F., Canida, Jack; Cooper, Saul; Faden, Paul D., & Kahne, Merton J. Mental health films in group psychotherapy. *Psychiatry*, 1957, 20, 27-38.—An interprofessional project is reported in which mental health films were used in group psychotherapy despite the general apprehension about exposing mental hospital patients to experiences likely to generate strong emotion. The groups were limited to 10 patients and a total of 20 patients had participated in 42 sessions during 12 months. The films had a marked catalytic effect on the group process and no harmful disturbed behavior relating to the films occurred in any of the patients.—C. T. Bever.

2941. Bockner, S. A controlled clinical trial of methylpentynol ("Oblivon"). *J. ment. Sci.*, 1957, 103, 218-221.—Trial with 87 patients showed relief from apprehension without notable side-effects.—W. L. Wilkins.

2942. Boenheim, C. Gruppen-Psychotherapie bei Jugendlichen. (Group psychotherapy with adolescents.) *Prax. Kinderpsychol. Kinderpsychiat.*, 1957, 6, 21-24.—Group therapy with adolescents is a difficult task especially during the initial sessions. Experience with adult group therapy and flexibility of the therapist are indispensable. The author worked with two small adolescent mixed groups, composed of shy and withdrawn young people. In one of them a female social worker served as cotherapist, thereby offering both father and mother figures to the group.

The conditions for the formation of such groups, therapeutic approaches, and course of treatment are described.—E. Schwerin.

2943. Bonnet, H. Action des neuroleptiques sur les crises et les troubles mentaux de certains épileptiques. (Action of the tranquilizers on the attacks and mental disorders of certain epileptics.) *Ann. méd.-psychol.*, 1956, 2(2), 193-225.—It is shown that chlorpromazine and reserpine used alone by epileptics tend to increase the frequency of their convulsive episodes. This "activation" of epilepsy can be neutralized by the administration of the usual anti-convulsive medication. The tranquilizing drugs do not thereby lose their effectiveness in ameliorating the mental and emotional condition of the patient. 33 references.—M. D. Stein.

2944. Browne-Mayers, Albert N., Henley, Thomas F., & Ostwald, Peter F. Case report of grand mal convulsions following more than 150 electric convulsive treatments: A clinical and electro-encephalographic study. *Psychiat. Quart.*, 1957, 31, 109-116.—"Seizures following electric convulsive treatments are a complication which might be avoided by the judicious teamwork of the EEG and the clinician. To avoid this complication, EEG's before and during convulsive therapy help the clinician decide on the frequency or discontinuation of the treatment."—D. Prager.

2945. Charbonnier, Gabrielle, & Foehr-Farrall, M. La méthode Guillery. (Guillery's method.) *Psyché, Paris*, 1956, 11, 14-45.—A psychotherapeutic method consisting in asking the patient to lie down on a couch, relax and let come to his mind images, dreams, memories. The therapist uses Pavlov's physiological laws to make remarks and therefore produces inhibitions, irradiation excitations, etc.—M. Knoebel.

2946. Chatagnon, C., & Chatagnon, P. Les modifications des sucres protéidiques et des protéines du sérum sanguin au cours des comas insuliniques provoqués et du post-électroshock. (Modifications of the nitrogenous sugars and of the proteins of the blood serum during insulin coma and postelectroshock.) *Ann. méd.-psychol.*, 1956, 2(1), 1-24.—The authors compare the chemical modifications occurring first in patients subjected to insulin coma, then in patients undergoing electroshock therapy. These modifications appear more severe during insulin coma than during electroshock; in both cases, there seems to be an increase of glycoproteins and of conjugated proteins in general. In the insulin coma however there is definite evidence of hypoglycemia while after electroshock, the blood sugar concentration is somewhat raised. 22 references.—M. D. Stein.

2947. Cooper, Saul, & Kahne, Merton J. Mental health and group psychotherapy. *A.M.A. Arch. Neurol. Psychiat.*, 1957, 77, 274-276.—Abstract and discussion.

2948. Delgado, Honorio. Psicoterapia breve y psicogogia. (Brief psychotherapy and psicogogia.) *Acta neuropsiquiat. Argent.*, 1956, 2, 380-383.—Psychotherapeutic action ought to evoke latent tendencies for a sane, self-fulfilling way of life. Deep comprehension, lasting attitude changes—"true mental health"—should be the goals of psychotherapy, long or short. Given this, "it seems [to the author] indispensable that brief psychotherapy be based principally

on la accion psicogogia or be accompanied by it. La psicogogia is that form of psychotherapy whose goal is the patient's orientation and spiritual improvement." To achieve this, Delgado concludes, the therapist must have a solid background in the humanities and philosophy as well as in medicine.—L. G. Datta.

2949. DiMascio, Alberto; Boyd, Richard W., & Greenblatt, Milton. Physiological correlates of tension and antagonism during psychotherapy: A study of "interpersonal physiology." *Psychosom. Med.*, 1957, 19, 99-104.—Continuous and synchronous recordings were made of social interaction in 12 interviews with physiological activities. Categories of interaction by the patient "were correlated with heart rate and lability of patient and therapist, and with skin temperature level and lability of patient." Selected results indicated "the patient appeared to express 'tension' more through his heart rate than skin temperature and 'antagonism' through his skin temperature. Thus the different 'emotions' noted in this S during psychotherapy tended to be expressed through different peripheral physiological pathways." These and other findings are discussed in relation to research methodology and to treatment techniques.—L. A. Pennington.

2950. DiMascio, Alberto; Suter, Elsi; Hyde, Robert W., & Greenblatt, Milton. Physiological effects of LSD: Report of a detailed investigation in one subject. *Psychiat. Quart.*, 1957, 31, 57-71.—After LSD the heart rate was more stable during the interview than during the rest period, the heart rate increased, pupils dilated, and sighing respirations increased. Sleepiness, depression, disruption of concept-formation were noted mostly on the first LSD day. Physiological and psychological effects of LSD decrease progressively with repeated administration. 17 references.—D. Prager.

2951. Erwin, H. J. Clinical observations on the use of promethazine hydrochloride in psychiatric disorders. *Amer. J. Psychiat.*, 1957, 113, 783-787.—Of 39 patients treated with promethazine hydrochloride, 11 recovered completely, 18 showed pronounced improvement, and 10 showed moderate improvement. Side effects and comparisons with other drugs are considered.—N. H. Pronko.

2952. Farrar, C. B. Psychotherapy. *Amer. J. Psychiat.*, 1957, 113, 865-870.—The role of psychotherapy in routine medical practice is discussed.—N. H. Pronko.

2953. Fogel, Joseph. Reliability of judgmental measures in psychotherapy. *Dissertation Abstr.*, 1957, 17, 1123-1124.—Abstract.

2954. Foulkes, S. H. Group-analytic dynamics with specific reference to psychoanalytic concepts. *Int. J. group Psychother.*, 1957, 7, 40-52.—"Classical psychoanalytic concepts can be used with advantage in a group setting to facilitate the process of therapy, but the processes corresponding to them are equivalent to and not identical with those observed in the individual psychoanalytic situation." In group-analytic theory, communication is seen as a process of fundamental importance to the study of behavior and the practice of psychotherapy. In group analysis, the group or community rather than the individual is the primary basis for conducting therapy. "In our view a dynamic science of psychotherapy is needed which will incorporate and turn to good account the revolu-

tionary idea that therapy is research and research in this field is therapy."—D. D. Raylesberg.

2955. Frank, Jerome D. Some determinants, manifestations, and effects of cohesiveness in therapy groups. *Int. J. group Psychother.*, 1957, 7, 53-63.—Interactions of members of a therapy group are in part understandable as manifestations of properties of the group per se rather than as exclusively determined by personal characteristics of the group's members. "The therapeutic relevance of group cohesiveness lies chiefly in the fact that the more a group's members are attracted to it, the more they are influenced by its standards." Groups which develop standards rewarding maintenance of communication, non-defensive expressions of feelings, honest attempts at self-examinations and which place a premium on mutual respect will, the more cohesive they are, the more likely induce therapeutic changes in their members.—D. D. Raylesberg.

2956. Frank, Jerome D., Gliedman, Lester H., Imber, Stanley D., Nash, Earl H., Jr., Stone, Anthony R. Why patients leave psychotherapy. *A.M.A. Arch. Neurol. Psychiat.*, 1957, 77, 283-299.—Study of 91 outpatients, along with review of the literature, indicates that the "attributes of the patient which are positively related to remaining in treatment are class, education, occupation, fluctuating illness with manifest anxiety, readiness to communicate distress and personal liabilities, influenceability, social integrity, and perseverance. With respect to the treatment situation, its relation to the patient's life situation, aspects of the treatment itself, and attributes of the therapist influence whether or not a patient will stay." These and other findings are discussed with reference to research methods and to social need factors. 31 references.—L. A. Pennington.

2957. Freeman, Walter. Frontal lobotomy 1936-1956: A follow-up study of 3,000 patients from one to twenty years. *Amer. J. Psychiat.*, 1957, 113, 877-886.—Since previous publications have presented data on the social adjustment of patients after lobotomy, the broader aspects of the problem of lobotomy in mental disorder are treated in this presentation. In the present series of patients, 70% of schizophrenics, 80% of affectives, and 90% of psychoneurotics are functioning outside of the hospital in the 5- to 10-year period.—N. H. Pronko.

2958. Gartsshtein, N. G., & Aslanov, A. S. Nauchnaia konferentsiia, posviashchennaia voprosam ucheniia o vysshei nervnoi deiatel'nosti primenitel'no k zadacham nervnoi i psikiatricheskoj kliniki. (Scientific conference, devoted to problems of the theory on higher nervous activity as applied to the tasks of the nervous and psychiatric clinics.) *Zh. vyssh. nervn. deiatel'.*, 1956, 6, 501-507.—Summaries of papers are given in which the theoretical and practical applications of Pavlovian theory to psychopathology and therapy are demonstrated and explored.—I. D. London.

2959. Glueck, Bernard C., Reiss, Harry, & Bernard, Louis E. Regressive electric shock therapy: Preliminary report on 100 cases. *Psychiat. Quart.*, 1957, 31, 117-136.—Asthma with a major psychogenic component and refractory to usual medical therapy may be relieved by regressive electric shock therapy, (REST). REST involves no more risks than EST. REST is superior to EST in treatment of

paranoid and catatonic schizophrenia. Schizophrenic cases under consideration for psychosurgery should first have a trial of REST.—D. Prager.

2960. Gour, K. N., & Bhargava, S. P. Biochemical studies in electric convulsive therapy. *J. ment. Sci.*, 1957, 103, 257-269.—Reported are blood sugar, plasma protein, blood urea, uric acid, serum potassium, plasma sodium and plasma chloride before, immediately after, 2 hours after, 4 hours after, 24 hours after, and after 10 shocks.—W. L. Wilkins.

2961. Gour, K. N., & Chaudhry, H. M. Study of calcium metabolism in electric convulsive therapy. (ECT) in certain mental diseases. *J. ment. Sci.*, 1957, 103, 275-285.—ECT leads immediately to hypercalcemia, followed by a relative hypocalcemia, and return to initial levels after 24 hours.—W. L. Wilkins.

2962. Hacker, Andrew. A political scientist looks at psychotherapy. *Int. J. soc. Psychiat.*, 1956, 2, 23-33.—This author, a political scientist, sees psychotherapy as a threat to individuality and thereby to democracy. He believes that the "helped" man, the man who has been led to his place in the world by hands other than his own, is no longer an individual, that he no longer possesses autonomy and independence even though he might now be a happy man. Many trenchant questions concerning the political implications of psychotherapy are raised. 21 references.—R. M. Frumkin.

2963. Hirschfeld, Gerhard. Neuro-activation, a new method of cerebral stimulation. *Conf. neurol.*, 1956, 16, 125-131.—The apparatus and technique of subconvulsive, ultra brief stimulation (pulse duration 7 microsec. at 50 pulses/sec.) is described. Treatments last 30-45 min., are given at first daily, then with decreasing frequency; an average of 25 treatments is required for optimum benefit. "From experimental and clinical observation we may assume that brain activity is enhanced. Preliminary results suggest its usefulness in neurotic depressions, post-traumatic personality disorders, senility, certain forms of apathy associated with tension and early simple schizophrenia. It can be used to advantage in combination with drugs such as metrazol and sodium amytal." 4 brief case histories. Discussion by W. T. Liberson.—M. L. Simmel.

2964. Hormia, Armo. A comparison between combined reserpine-chlorpromazine and chlorpromazine therapies in psychiatry. *Acta psychiat., Kbh.*, 1956, 31, 437-446.—Out of 109 men comprising most psychotic categories 72 were treated with chlorpromazine alone and 37 in combination with reserpine. In the combined treatment the complication frequency was reduced, especially so allergic-toxic complications. Patients with accessory somatic illnesses stood the combined therapy better, and in general as well as in schizophrenia there was a better therapeutic response. In depressions not due to organic causes, however, the author found chlorpromazine preferable.—R. Kaelbling.

2965. Isbell, Harris, & Logan, C. R. Studies on the diethylamide of lysergic acid (LSD-25): II. Effects of chlorpromazine, azacyclonol, and reserpine on the intensity of the LSD-reaction. *A.M.A. Arch. Neurol. Psychiat.*, 1957, 77, 350-358.—Results indicated that chlorpromazine "ameliorated partially the mental state induced by the diethylamide" whether administered before or after LSD. Azacyclonol

(Frenquel) and reserpine had no such mitigating effects. It was concluded that the LSD psychosis cannot be used as "an effective screen for drugs that might be useful in the pharmacotherapy of mental illness." 21 references.—*L. A. Pennington*.

2966. Kahn, Robert Konrad. **Therapist discomfort in two psychotherapies.** *Dissertation Abstr.*, 1957, 17, 1118-1119.—Abstract.

2967. Kalinowsky, Lothar B. **Psychotherapeutic problems in connection with insulin and electroshock therapy and psychosurgery.** *Conf. neurol.*, 1956, 16, 156.—Abstract.

2968. Karmiol, Edward. **The effect of the therapist's acceptance of therapeutic role on client-therapist relationship in a reflective and a leading type of psychotherapy.** *Dissertation Abstr.*, 1957, 17, 1119.—Abstract.

2969. Kaufman, Milton. **Readiness for, and success in group psychotherapy: A study of the ability of certain social, familial, and personality factors to permit prediction of success in group psychotherapy.** *Dissertation Abstr.*, 1957, 17, 896.—Abstract.

2970. Korin, Hyman; Fink, Max, & Kwalwasser, Simon. **Relation of changes in memory and learning to improvement in electroshock.** *Conf. neurol.*, 1956, 16, 88-96.—The subjects were 40 consecutive patients with a variety of psychiatric diagnoses, all referred for electroshock treatment, and 21 matched untreated controls. Recall of lists of common 3-letter words was tested (i) immediately after an interpolated learning of a list of nonsense syllables and (ii) after a 10-min. rest period during which a copy of *Life* magazine was read. For both conditions the mean number of words recalled increases somewhat for the controls, while it decreases sharply within 24 hours of the first treatment for the shock patients, remains significantly low throughout the period of treatment but is back to the level of the controls within 3 weeks of the cessation of shock therapy. In general recall after interpolated learning was a more sensitive index of these changes than recall after 10 min. rest. Comparing recall decrement and clinical improvement the authors conclude "that marked memory changes are not a prerequisite for improvement but that the lack of marked memory changes with 20 treatments is associated with lack of improvement." 17 references.—*M. L. Simmel*.

2971. Kotkov, Benjamin. **Common forms of resistance in group psychotherapy.** *Psychoanal. Rev.*, 1957, 44, 88-96.—These resistances are unfolded as control and avoidance of feelings, denial of emotions, phobia, and belligerences. These reactions are manifested in speaking difficulties, antagonistic reactions, mobilization of symptoms, and questions about the effectiveness of treatment.—*D. Prager*.

2972. Kretschmer, Wolfgang, Jr. **Das ästhetische Problem in der Psychotherapie.** (The aesthetic problem in psychotherapy.) *Z. Psychother. med. Psychol.*, 1957, 7, 48-52.—Modern psychotherapy has failed to realize the significance of "aesthetic education" as emphasized by Goethe, Schiller, and others. Despite art and music therapy, the uses of aesthetic theory have been neglected. Aesthetic understanding is important for psychotherapy because it integrates the otherwise separate spheres of psychological natu-

ralism and spiritual autonomy. Aesthetic perception provides vivid contact with the rich variety of life phenomena, encouraging us to an artistic mastery of the dissonances. The psychotherapist however must develop an aesthetics that relates to the conditions of his work. 19 references.—*E. W. Eng*.

2973. Lebovici, Serge. **Der Platz der Psychoanalyse in der Psychotherapie des Kindes.** (The role of psychoanalysis in psychotherapy with children.) *Prax. Kinderpsychol. Kinderpsychiat.*, 1957, 6, 38-41.—The controversy between Anna Freud and Melanie Klein concerning the indications of child analysis are superseded. Irrespective of the age of the child, psychoanalysis can be successful only if treatment leads to verbal and hence conscious expression of the conflicts and resistances which manifest themselves in the course of treatment. Psychotherapeutic (not necessarily psychoanalytic) accessibility of the child may be accomplished by two methods: (1) self-expression (one form of which is play); and (2) the relationship which the child establishes with his therapist.—*E. Schwerin*.

2974. Leiberman, D. M., & Vaughan, G. F. **The use of some new pharmacological agents in psychiatry.** *J. ment. Sci.*, 1957, 103, 110-118.—Chlorpromazine, reserpine, and lacumin all act on the mesencephalic and diencephalic parts of the brain; further research is needed. 48 references.—*W. L. Wilkins*.

2975. Little, A. F. M., & Reid, A. Arnoud. **Recovery time from modified and unmodified ECT.** *J. ment. Sci.*, 1957, 103, 270-274.—Clinical results of trials of four sorts of drugs are reported.—*W. L. Wilkins*.

2976. McCormick, Charles G. **Group dynamics: Homeopathic treatment.** *Int. J. group Psychother.*, 1957, 7, 103-112.—Group dynamics theory assumes erroneously that interaction is the basic therapeutic agent in group therapy. "Group dynamics principles are impressive for the degree to which they fail to recognize that the presence of the therapist determines the difference for the patient, not the presence of other 'sick' people as such. They seem to ignore the fact that treatment is initiated by patients being exposed to a therapist who responds abnormally to manifestations of illness. The group dynamics practitioner is engaged in a group enterprise, based on principles quite distinct from those of psychotherapy. . . . He is, in effect 'treating groups.' This is neither the interest nor function of a psychotherapist."—*D. D. Raylesberg*.

2977. McQuown, Norman A. **Linguistic transcription and specification of psychiatric interview materials.** *Psychiatry*, 1957, 20, 79-86.—Linguistic analysis was applied to the interview material of Will and Cohen (see 28: 4489) aiming at total accountability, replicability, and verifiability. Half of the interview was phonetically transcribed and functionally analyzed for phonemics, vocal modifiers, and morphemics. Samples of linguistic transcriptions and verbal profiles of analyst and patient are presented. Some problems of 'content' analysis are discussed. Study of language and associated vocal behavior confirms or revises the psychiatrist's intuitions with tangible evidence which could be especially useful as training tool.—*C. T. Bever*.

2978. Mangel, H. Sh'natayim shel nisayon psichiatri im largactil. (2 years of psychiatric experience with largactil.) *Harefuah*, 1956, 51, 200-205.—Report on experiences with 214 patients (94 m & 120 f) from 1953 until 1955, who were treated with largactil. 70% of them showed a slight or marked improvement. Improvements were achieved in 91.9% of acute cases, 83.7% of subacute, and 53.2% of chronic cases. Advantages of largactil over other physical treatment are due to: (a) its fast sedative action; (b) easy administration; (c) economy in personnel; (d) elimination of fear accompanying other forms of physical treatment. English and French summary.—H. Ormian.
2979. Martin, Elmore A., Jr., & Hill, William Fawcett. Toward a theory of group development: Six phases of therapy group development. *Int. J. group Psychother.*, 1957, 7, 20-30.—Hypothesis is advanced that a therapy group moves through six phases in its development. These are: (1) individual unshared behavior in an imposed structure; (2) reactivation of fixated interpersonal attitudes; (3) exploration of interpersonal potential within group; (4) awareness of interrelationships, subgroupings and power structures; (5) consciousness of group dynamics and group process problems; (6) the group as an effective integrative-creative social instrument. "Most therapy groups, before their ultimate dissolution, probably do not get to the fifth phase. The reasons for this may lie in the fact that operation in the third and fourth phase is presumed to be the goal of therapy. It may also be that many therapists do not have the skills to aid the group to go beyond this."—D. D. Raylesberg.
2980. Mazurkiewicz, Joseph F. A comparison of the effect of a reflective and of a leading type of psychotherapy on client concept of self, of ideal, and of therapist. *Dissertation Abstr.*, 1957, 17, 1121.—Abstract.
2981. Morello, Aldo, & Barteczek, Adolph. Angiographic findings after prefrontal lobotomy. *Psychiat. Quart.*, 1957, 31, 93-95.—Angiographic findings indicate that when gliosis develops in the frontal lobe after operation, the blood flow diminishes and parallel changes in the vascular apparatus take place.—D. Prager.
2982. Paerregaard, Grethe. The value of narcoanalysis as shown by a re-examination. *Acta psychiat., Kbh.*, 1956, Suppl. 106, 257-264.—56 narcoanalysed patients are re-examined. The material mostly consists of serious neuroses of long standing without acute trauma as narcoanalysis had been used only in cases in which other forms of therapy had failed. The therapeutic value of narcoanalysis is found to be insignificant, whereas two-thirds of the re-examined patients have benefited in varying degrees from their stay in the hospital.—R. Kaelbling.
2983. Paul, Norman L., Fitzgerald, Edward, & Greenblatt, Milton. The long term comparative results of three different lobotomy procedures. *Amer. J. Psychiat.*, 1957, 113, 808-814.—"A 5-year follow-up of 116 chronic mentally ill patients, divided into 3 groups each of which was subjected to a different lobotomy procedure (e.g., full bilateral, bimodal, and unilateral operations) disclosed that bimodal lobotomy was superior to either of the other 2 procedures in the treatment of chronic mentally ill patients."—N. H. Pronko.
2984. Pennes, Harry H., & Hoch, Paul H. Psychotomimetics, clinical and theoretical considerations: Harmine, Win-2299 and nalline. *Amer. J. Psychiat.*, 1957, 113, 887-892.—The clinical effects of 3 psychotomimetics and their nosological and biological aspects are considered. 28 references.—N. H. Pronko.
2985. Peterson, Arnold O. D. A factor analysis of therapists: An exploratory investigation of therapeutic biases. *Dissertation Abstr.*, 1957, 17, 1121-1122.—Abstract.
2986. Reding, Georges R. Les états de dépendance en clinique psychanalytique. (Dependence states in the psychoanalytic clinic.) *Rev. franç. Psychanal.*, 1957, 21, 93-116.—During analysis, the dependence state develops due to the technique itself, particularly to stress during the systematic analysis of transference. As to the form in which this object relation is manifested, it is attached genetically to the earliest object relations. On the clinical level, it is compared to a perversion, placing this midway between a neurosis and a psychosis.—G. Rubin-Rabson.
2987. Rosenthal, David, & Frank, Jerome D. Psychotherapy and the placebo effect. *Psychol. Bull.*, 1956, 53, 294-302.—The theoretical and methodological problems involved in studies concerned with the "placebo effect" are presented. There is a need for more theoretically oriented research and for "a greater emphasis upon control factors and other methodological considerations." Future research should be directed towards a further understanding of the influence of non-specific factors in psychotherapy. 39 references.—W. J. Meyer.
2988. Sainz, Anthony; Bigelow, Newton, & Barwise, Constance. On a methodology for the clinical evaluation of pherenopraxic drugs. *Psychiat. Quart.*, 1957, 31, 10-16.—Nine new drugs were applied to more than 1,200 patients. Uncontrolled psychotherapeutic effect, spontaneous variation in internal environment, and placebo reactions were eliminated as obstacles to objective evaluation of these drugs. A multidisciplinary approach is required for complete evaluation.—D. Prager.
2989. Schiele, Burtrum C., Anderson, Richard W., & Simon, Werner. Current status of chlorpromazine and reserpine in psychiatric practice. *J. Lancet*, 1956, 76, 179-185.—The authors review more recent reports, conferences and their own clinical experience with chlorpromazine and reserpine. These drugs have unique tranquilizing properties with little or no clouding of consciousness. They are very useful in controlling acute states of excitement, but neither seem to ameliorate states of depression "The relief of tension and excitement produced by these drugs has already resulted in pronounced reduction in somatic treatment (electroshock therapy, insulin coma treatment and lobotomy) formerly widely used to control these symptoms."—G. K. Morlan.
2990. Schmidt, K. E. Combined treatment with chlorpromazine and reserpine. *J. ment. Sci.*, 1957, 103, 200-208.—A behavioral rating scale was developed to objectify the ratings of improvement in therapy. Good clinical results obtained and it is inferred that the drugs work synergistically.—W. L. Wilkins.

2991. Schmitt, Robert J. The psychodynamics of the tranquilizing agents. *Psychiat. Quart.*, 1957, 31, 17-30.—"The tranquilizing agents have been effective because of their influence upon the basic force in the production of mental symptomatology—anxiety." 17 references.—D. Prager.

2992. Schwidder, Werner. Die Bedeutung der Psychoanalyse und der aus ihr hervorgegangenen Behandlungsmethoden für die Psychotherapie im Kinds- und Jugendalter. (The significance of psychoanalysis and other therapeutic methods derived from it for psychotherapy of children and adolescents.) *Prax. Kinderpsychol. Kinderpsychiat.*, 1957, 6, 41-47.—Psychoanalysis has contributed to child psychiatry not only as a therapeutic technique but also as a diagnostic and preventive method. In child psychiatry psychoanalysis is the preferred method of treatment of children between 6 and 10 years. This is illustrated by a case of a 10-year-old boy with neurotic symptoms. There are other, non-analytic techniques which may also be applied. These are briefly cited.—E. Schwerin.

2993. Sechrest, Lee Burton. Patients' interpretations of their psychotherapists. *Dissertation Abstr.*, 1957, 17, 1129.—Abstract.

2994. Sweel, Alexander. Combined electroconvulsive-electrostimulatory therapy and therapeutic shifting of affect. *Conf. neurol.*, 1956, 16, 131-136.—This is a report of 91 successfully treated patients. The author assumes that electroconvulsive therapy relieves depression but increases anxiety, while electrostimulation relieves anxiety but potentiates depression. In cases of anxiety which are otherwise resistant to treatment he has used electrostimulation to convert the anxiety to depression and then relieves the depression gradually by electroconvulsive shock. Discussion by R. W. Medlicott.—M. L. Simmel.

2995. Tawadros, Samuel M. Factors in group therapy. *Int. J. soc. Psychiat.*, 1956, 2, 44-50.—Group dynamics and interrelations provide the basic contribution in the group treatment of the mentally ill. 19 references.—R. M. Frumkin.

2996. Teirich, H. R. Soziometrie und Gruppenpsychotherapie. (Sociometry and group psychotherapy.) *Z. Psychother. med. Psychol.*, 1957, 7, 41-47.—The construction of a series of sociograms is of value for understanding the changes occurring in a therapeutic group. Occasionally the sociogram may be of therapeutic value to a patient with a false idea about the extent of his isolation. Following group change by means of serial sociograms reveals how labile and shifting the positions of persons in a group may be. 20 references.—E. W. Eng.

2997. Tierney, Thomas E. Psychotherapy and reading tutoring: Effect of psychotherapy and reading instruction on reading ability and personal and social adjustment. *Dissertation Abstr.*, 1957, 17, 811-812.—Abstract.

2998. Tucker, Walter I., Nicholson, Morris J., & Ruzicka, Edwin R. Electroshock treatment with pentothal and anectine: Results in 100 consecutive patients. *Conf. neurol.*, 1956, 16, 157-168.—The group consisted of 64 women, and 36 men, age range 21-75 years; 65 were inpatients, 35 outpatients. "Patients were not accepted for treatment if they were mentally disturbed to the extent that they could not

cooperate in treatment at home or in a general hospital. Psychotherapy was used before, during and after electroconvulsive treatment as indicated." Details of treatment and complications are discussed. After a mean of 12 combined treatments 50 patients are described as recovered, 32 patients improved, 18 unchanged. Discussion by J. Epstein and M. Brunner-Orne.—M. L. Simmel.

2999. Victoria, Marcos, & Cárcamo, Celes E. Técnicas de psioterapia breve. (Techniques of brief psychotherapy.) *Acta neuropsiquiátr. Argent.*, 1956, 2, 374-379.—After citing examples of brief psychotherapy, e.g., as in primitive medicine, the authors point out that initially Freud himself used methods that were not only brief but also long distance. The work of Codet, Steckel, and Alexander and French are evaluated; three points on which psychotherapy is said to depend are: (1) the personality of the patient, (2) the psychological status of the patient, and (3) the personality and experience of the therapist. The authors recommended the "principle of flexibility," the use of brief psychotherapy for neuroses, minor conflicts, and ambivalences, i.e., in cases not requiring deep investigation or total restructuring of the personality.—L. G. Datta.

3000. Wagner, Frederik F. A dynamic approach to the problem of hypnotic induction. *J. clin. exp. Hypnosis*, 1956, 4, 93-98.—By utilizing such factors as S's fantasies, conscious and unconscious wishes and fears, along with his attitude toward the hypnotist, a tailor-made technique should result which would permit the hypnotist to "phrase his suggestions in the patient's lingo and assume a proper attitude according to the patient's need."—S. Fisher.

3001. Warren, Effie. Treatment of marriage partners with character disorders. *Soc. Casework*, 1957, 38, 118-126.—Describes how caseworkers in a family agency have learned to help clients with marital conflicts whose troubles seem to stem primarily from character disorders. After defining "character disorder," the author discusses casework techniques for helping clients with such disorders. The caseworker must recognize the types of disorder the client presents, limitations in treatment, the worker's role as advice-giver, transference and counter-transference reactions.—L. B. Costin.

3002. Wilmer, Harry A. A psychiatric service as a therapeutic community. *U. S. Armed Forces med. J.*, 1956, 7, 640-654.—A receiving ward in a naval psychiatric hospital was operated as a therapeutic community. Daily meetings of all patients were held on the ward. "The efforts to foster acculturation of the patients by the patients with staff help and encouragement have made it possible totally to eliminate the use of the quiet room and parenteral sedation, and greatly to diminish the amount of oral sedation."—G. H. Crampton.

3003. Ziferstein, Isidore, & Grotjahn, Martin. Group dynamics of acting out in analytic group psychotherapy. *Int. J. group Psychother.*, 1957, 7, 77-85.—"Acting out" is promoted in the analytic-therapeutic process because the tendency to do so is stimulated by the unconscious impulses and anxieties of the other patients. Acting out is essentially a resistance and is therapeutically useful only as it serves as a transition to understanding. Consistent interpretation of the acting-out resistance contributes to

the development of insight and puts a stop to the acting out process.—D. D. Raylesberg.

(See also Abstracts 2652, 3024, 3058, 3071, 3073, 3085, 3092, 3096, 3100, 3108, 3119, 3135, 3144, 3145, 3151, 3152, 3153, 3154, 3157, 3163, 3166, 3172, 3174, 3177, 3178, 3183, 3186, 3190, 3191, 3201, 3206, 3208, 3212, 3213, 3222, 3226, 3239, 3241, 3247, 3250, 3251, 3314)

CHILD GUIDANCE

3004. Abbe, Alice E. The relationship of maternal attitudes to the diagnostic category of the child: A descriptive study of maternal attitudes toward child behavior, and their relationship to the kind of adjustment made by the child, as seen in the Queens College Educational Clinic during one year. *Dissertation Abstr.*, 1957, 17, 892-893.—Abstract.

3005. Farwell, Gail F., & Peters, Herman J. Social-personal concerns: Guidance implications. *Understanding the Child*, 1957, 26, 110-112.—Positive help from the home and school are needed by children for successful personal, social, and moral development. The school counselor should be concerned with assisting youngsters in achieving self-direction in the area of social-personal concerns.—W. Coleman.

3006. Goldstein, Irving M., Judas, Ilse; Sutton, Helen A., & Falstein, Eugene I. Adjustment patterns of leadership and defenses in a disturbed child group. *A.M.A. Arch. Neurol. Psychiat.*, 1957, 77, 312-317.—Study of 24 half-hour breakfast sessions, spaced at intervals of 1 or 2 a week over a 4-month period, of the "boy's group" in an inpatient setting was attempted in the effort to arrive at adequate standards for placement of the new admission. While the approach is viewed as exploratory, the results indicated that "age, length of hospitalization, physical size, and psychiatric impairment did not appear to be critical or especially pertinent criteria for group placement." It seemed that "maladaptive individual adjustments may have complementary, adaptive functions in the group processes."—L. A. Pennington.

3007. Gordon, Jesse E. The validity of Shoben's Parent Attitude Survey. *J. clin. Psychol.*, 1957, 13, 154-156.—Rank correlations between expert observers' judgments of attitudes of mothers toward their children, as these attitudes were inferred from extensive observation of the mothers' behaviors toward their children over a 12 day period, and mothers' scores on Shoben's scales were close to zero for two independent samples of 20 and 21 mothers. For these samples the judgments of 13 and 11 staff members correlated (.58 and .69, respectively); there had been daily staff discussions of the child-parent pairs. All Ss were mothers of pre-school deaf children attending a diagnostic study camp.—L. B. Heathers.

3008. Hofstein, Saul. Social factors in assessing treatability in child guidance. *Children*, 1957, 4, 48-53.—The author analyzes a number of factors involved in a child's ability to profit from mental health services: (a) cultural differences; (b) purpose and goals; (c) involvement of the parents; (d) use of community resources; (e) other family members; (f) significant community relationships; and (g) assessment of social factors.—S. M. Amatora.

3009. Knight, Dorothy; Ludwig, Alice Jeanne; Strazzulla, Millicent, & Pope, Lillie. The role of varied therapies in the rehabilitation of the retarded child. *Amer. J. ment. Defic.*, 1957, 61, 508-515.—The role of occupational therapy, music, speech and remedial reading is described in the treatment of a single child who presented the problems of retardation and hyperactivity.—V. M. Staudt.

3010. Kozier, Ada. Casework with parents of children born with severe brain defects. *Soc. Casework*, 1957, 38, 183-189.—The parents of newborn children with severe brain defects are subject to great emotional strain which may affect their ability to make adequate plans for their babies and themselves. Social work help should be offered them in order to "clarify their feelings sufficiently to see the child as a separate human being, and his handicap as an unfortunate accident of nature."—L. B. Costin.

3011. Rhodes, William C., & Matthews, Phyllis N. Combatting maternal deprivation. *Children*, 1957, 4, 54-60.—The authors report a multidisciplinary, interagency project in a Georgia county: (a) original design; (b) the locale; (c) preparing the county; (d) county planning; (e) operation of the project; (f) a case story; (g) the nurse's role; (h) recommendations and followup; (i) general information; and (j) a second project.—S. M. Amatora.

3012. Stott, D. H. Unsettled children and their families. New York: Philosophical Library, 1957. 240 p. \$6.00.—This book is an attempt to determine which of our parental inadequacies matter most, shows in useful detail the kinds of weaknesses that probably give rise to delinquency and other "unsettledness." Since the truest kind of therapy is probably that done in the community, the author tries to make the principles of diagnosis and counseling available to those whose work brings them into continuous relationship with the children and their families. Detailed examples of cases, diagnosis and treatment.—M. M. Gillet.

3013. Van der Horst-Oosterhuis, C. J. Thought painting: A key to therapy of emotionally disturbed children. *J. soc. Ther.*, 1957, 3, 2-8.—The method of "painting what you think" is described and its application to disturbed children discussed by numerous illustrations. "Working through" the problems usually requires from 6 to 9 months in time.—L. A. Pennington.

VOCATIONAL GUIDANCE

3014. Tanzer, Walter L. Vocational choice and personality: A study of the relationship of personality to choice of vocational field and vocational aspiration level. *Dissertation Abstr.*, 1957, 17, 890.—Abstract.

3015. Vanden Bulcke, L. Differentieel medisch besluit na lichamelijk onderzoek in verband met Studie- en Beroepsoriëntering. (Medical diagnosis in connection with educational and vocational guidance.) *Tijdschr. Stud.-Beroepsoriënt.*, 1956, 3, 97-105.—Directions concerning medical examination in connection with academic and vocational guidance: outline of the examination, conclusions, need for repeated examinations in the course of 3 different stages of individual development. The author suggests mentioning whether deficiencies are permanent

or temporary and whether contra-indications are absolute or relative. English and French summaries.—*R. Piret.*

3016. Verly, R. *L'orientation professionnelle du diabétique.* (Vocational guidance for the diabetic.) *Bull. Orient. scol. profess.*, 1956, 5, 59-63.—Vocations that are appropriate for the diabetic should not be taxing and should not endanger his health: no work that requires strenuous muscular effort, exposure to colds, skin lesions, digestive disorders, gastronomic temptations (e.g., work in a pastry shop or restaurant).—*R. Piret.*

(See also Abstracts 3043, 3317, 3324, 3329)

BEHAVIOR DEVIATIONS

3017. Cole, Nyla J., Branch, C. H. Hardin, & Shaw, Orla M. *Mental illness: A survey assessment of community rates, attitudes, and adjustments.* *A.M.A. Arch. Neurol. Psychiat.*, 1957, 77, 393-398.—"Using a personal-interview, largely unstructured approach, trained interviewers visited 200 consecutive homes in 8 city blocks in Salt Lake City. . . . They elicited information regarding incidence of mental illness, attitudes toward mental illness and its treatment," and other pertinent data. Of the population sampled $\frac{1}{4}$ of the adult group appeared "to have some kind of specific mental illness, and about $\frac{1}{2}$ of the families sampled contained at least one mentally ill person." About 60% of those ill had received no medical or psychiatric treatment. These and other findings are discussed in relation to the community mental health program broadly defined.—*L. A. Pennington.*

3018. Devereux, George. *The criteria of dual competence in psychiatric-anthropological studies.* *J. Hillside Hosp.*, 1957, 6, 87-90.—Collaboration between 2 specialists, each somewhat familiar with the field of the other, is limited; really fruitful interdisciplinary science can arise only when one person firmly unites both sciences. The competent student of culture and personality must be fully and professionally aware of all implications of at least one point of view each in anthropology and personology. This requires consecutive formal training and 2 disciplines. The interdisciplinary student should have been guilty at least once of every professional bias and every artificial scotomatization of facts outside his principal field of specialization.—*C. T. Bever.*

3019. Fowler, Raymond D., Jr. *Psychopathology and social adequacy: A Rorschach developmental study.* *Dissertation Abstr.*, 1957, 17, 1117-1118.—Abstract.

3020. Gayral, L. *Crises et Paroxysmes catathymiques.* (Attacks of paroxysmal swings of mood.) *Ann. méd.-Psychol.*, 1956, 2(1), 25-50.—Presented as a symptomatic entity, attacks of paroxysmal mood swings are examined in various pathological settings: in hypoglycemic states; in epilepsy accompanying focal lesions of the mesodiencephalon; in particular premenstrual disorders. These attacks are characterized by sudden violent breaks in the subject's mood, motor and vaso-motor disturbances, irritability and a considerable lowering of affective tone, with an almost complete incapacity to react emotionally, giving the impression of automatism to the patient's actions.—*M. D. Stein.*

3021. Glass, Albert J. *Psychologic considerations in atomic warfare.* *U. S. Armed Forces med. J.*, 1956, 7, 625-639.—"The common psychologic abnormalities to be expected in atomic warfare are states of temporary mental disruption and their sequelae of increased apprehensiveness. Major determinants of behavior under conditions of atomic attack include the intensity and duration of the traumatic agent, training and preparation, efficiency of communication, leadership, and group unity. . . . Effective treatment of psychiatric casualties under conditions of atomic attack should be based on principles that include a decentralized or peripheral level of operation, expectancy for recovery, and brief simplified methods."—*G. H. Crampton.*

3022. Hollingshead, August B., & Redlich, Fredrich C. *Social class and mental illness: A community study.* New York: Wiley, 1958. ix, 442 p. \$7.50.—"Is mental illness related to social class? Does a mentally ill patient's position in the status system affect how he is treated for his illness? . . . Each class exhibits definite types of mental illness. Moreover, each class reacts to the presence of mental illness in its members in different ways, and the treatment of psychiatric patients within the various classes differs accordingly. Successive chapters tell the story of how members of the community become patients, how they and their families responded to psychiatric intervention, and the effects of social class on patients and therapists. The book ends with some recommendations on what our society could do about improving socially determined shortcomings of psychiatric practice."—*J. Arbit.*

3023. Karson, Samuel, & Pool, Kenneth Bryner. *The abstract thinking abilities of mental patients.* *J. clin. Psychol.*, 1957, 13, 126-132.—"An exploratory factor study in the general area of abstract thinking was undertaken for the purpose of searching for common factors in a variety of measures believed to be of value in evaluating patients' abstract thinking abilities. . . . 'S's' were 50 randomly selected white, male, VA NP patients of varying diagnoses. The original r matrix consisted of Pearson, biserial, and tetrachoric r's. A Thurstone centroid analysis was done on 24 scores derived from seven test instruments; the Rorschach contributed nearly half of these scores. Rotation was done using graphic procedures. Three of the six orthogonal factors derived were tentatively identified as abstract ability or general intelligence, perceptual organization, and free responsiveness to the environment. 28 references.—*L. B. Heathers.*

3024. Kline, Nathan S. *Criteria for psychiatric improvement.* *Psychiat. Quart.*, 1957, 31, 31-40.—In the present state of our knowledge, the most adequate way of evaluating psychological improvement is by determining how happy and satisfied the patient is with himself in social, psychological, and somatic areas.—*D. Prager.*

3025. Lazar, M. *B'ayot bay'hasim habenishiyim shel hapsihiater bamosad.* (Problems of interpersonal relations of the psychiatrist in the hospital.) *Harefuah*, 1956, 51, 225-227.—There exists a problem of emotions "transferred" on the psychiatrist by patients in a hospital, especially when there are some physicians, and differences may arise between their indications. The 2nd problem is: The (indifferent, objective, aggressive) relation of the family to the

physician and his activities, especially when they fail to admit their relative's illness and the need of his hospitalization. It is important not to give opportunity to the relatives to find contradiction between the psychiatrists within one hospital. The 3rd problem issues from relations with other factors in the hospital, especially with the administrative personnel. These situations demand much tact, and often the ability of taking a decision at once.—H. Ormian.

3026. Marren, John J. **Psychiatric problems in troops in Korea during and following combat.** *U. S. Armed Forces med. J.*, 1956, 7, 715-726.—A statistical comparison is provided of the incidence and severity of psychiatric syndromes for the periods immediately before and after the cessation of hostilities. "Battle stress was shown to directly affect psychiatric incidence, evacuation, and hospitalization rates, which were substantially increased during the combat period. Psychiatric incidence rates were approximately 25 per cent higher during combat."—G. H. Crampton.

3027. Morgan, Norman C., & Johnson, Nelson A. **Failures in psychiatry: The chronic hospital patient.** *Amer. J. Psychiat.*, 1957, 113, 824-830.—A series of 2,166 patients was studied in an attempt to determine the nature of the mental disease and to identify the social resources that might play a part in the patient's failure to recover and to return to the community. These factors are presented and discussed.—N. H. Pronko.

3028. Nacht, S. (Ed.) **La psychanalyse d'aujourd'hui.** (Psychoanalysis today.) 2 vols. Paris: Presses Universitaires de France, 1956. viii, 867 p. 2800 fr.—Contributions include: Indications and contraindications for analysis in the adult, by S. Nacht and S. Lebovici; The psychoanalytic clinic. Object relation, by M. Bouvet; Psychoanalytic therapy, by S. Nacht; The psychoanalysis of children, by S. Lebovici, R. Diatkine, J.-A. Favreau, P. Luquet, and J. Luquet-Parat; Psychoanalytic study of adolescence, by P. Male; Psychoanalysis and education, by J.-A. Favreau and A. Doumic; Psychoanalysis and problems in sexuality, by F. Pasche, M. Renard, and J. Mallet; Psychoanalysis and medicine, by R. Held; Psychoanalysis and neurobiology, by J. de Ajuriaguerra, R. Diatkine, and J. Garcia Badaracco; Psychoanalysis and psychosomatic medicine, by P. Marty and M. Fain; Analytic psychotherapy of psychosis, by P.-C. Racamier; Psychoanalysis and mental prophylaxis, by A. Berge; Psychoanalysis and sexology, by M. Bonaparte; Evolution of psychoanalysis by M. Benassy; Review of psychoanalytic literature, by S. Viderman; Organization of psychoanalysis in the world, by M. Schlumberger and P. Marty.—G. Rubin-Rabson.

3029. Opler, Marvin K., & Singer, Jerome L. **Ethnic differences in behavior and psychopathology: Italian and Irish.** *Int. J. soc. Psychiat.*, 1956, 2, 11-23.—This study of 40 Irish and 37 Italian male mental patients indicates that members of these two different ethnic groups differ in their psychogenetic and psychodynamic pattern. Thus, if culture influences types of family organization and the social experiences and role of its carriers, its deepest reflection will occur on any and all biosocial levels as evidenced in norms of behavior and in types of psychopathology.—R. M. Frumkin.

3030. Pittenger, Robert E., & Smith, Henry Lee, Jr. **A basis for some contributions of linguistics**

to psychiatry. *Psychiatry*, 1957, 20, 61-78.—The technical advances of electronic sound and photographic recording provide significant assistance to psychiatry by providing an enormous volume of observable data. Some of the developments of scientific linguistics and kinesics, the systematics study of gestures and motions, are described. These afford more accurate descriptive tools for the study of interpersonal communication. The phonological and morphological levels and other vocal phenomena of language are discussed; for a full study of communications a systematic analysis of nonverbal components is presented as essential.—C. T. Bever.

3031. Porot, M. **Les retentissements psychopathologiques des événements d'Algérie.** (Psychopathological repercussions of the events of Algeria.) *Ann. méd.-psychol.*, 1956, 2(4), 622-636.—After examining several cases of psycho-pathological disorders blamed on the Algerian riots, the author states that these conditions have little to do with the breaking-through of pathological material. In no case could he find the traumatic events to be the direct cause of psychological troubles; rather, the patients seemed to use them, incorporating them in their own neurotic or psychotic conflicts.—M. D. Stein.

3032. Rao, M. S. **An introduction to a new psychiatry through the sexual disorders in the male.** Jaipur, India: National Institute of Psychology, 1957. xv, 513 p. \$3.00.—Part I addressed to male patients with sexual disorders describes the sexual anatomy, physiology and psychology of the male. Ayurvedic teachings on sex and health, pathogenic misconceptions, and sexual dysfunction are discussed with reference to case material. Part II, directed at psychiatrists, aims to explain the etiology and essence of hysteria, hypochondriasis, neurasthenia, paranoia, and melancholia in terms of 'conative urges of wishes and fears.' The author cautions against the 'misleading' Freudian and religious ways of thought.—C. T. Bever.

3033. Reca, Telma. **Neurosis and psychosis en la infancia.** (Neurosis and psychosis in infancy.) *Acta neuropsiquiátr.*, Argent., 1956, 2, 389-402.—After reviewing separately for neuroses and psychoses the development and current state of child psychiatry, and pointing out diagnostic and therapeutic lacunae, Reca concludes that "child psychiatry is . . . a young scientific discipline," whose development has not followed the sequences of other branches of medicine and whose evolutionary stage is "rudimentary." She proposes, however, to consider the unique features of Latin American problems, the cultural bases, the character of the institutions, and the specific needs of the countries in evaluating professional standards. 20 references.—L. G. Datta.

3034. Scherzer, Carl J. **Ego injury in illness.** *Pastoral Psychol.*, 1957, 8(73), 31-34.—Illness "may be accompanied by strong feelings of ego injury." Since every normal person likes to feel important and needed, those "associated with a person suffering an ego injury stress can be helpful if they remember that the patient is still a person." Some patients become aggressive; others, helpless; still others, humorous.—A. Eglash.

3035. Shea, James E. **The human body and the human being.** *A.M.A. Arch. Neurol. Psychiat.*,

1956, 76, 513-528.—Here is examined "some of the evidence concerning 'physical' factors in human nature and human behavior. There is incontrovertible evidence that certain modes of behavior are genetically determined. Among these are certain cases of homosexuality and schizophrenia. The evidence is equally strong in manic-depressive psychosis and other conditions." It is also likely that genetic factors are operative in criminality and psychoneurosis. A plea is made for the behavior scientist "to listen to what our neighbor in the next camp, or discipline, has to say." 50 references.—L. A. Pennington.

3036. Weinschenk, Curt. *Über die Bedeutung der Gestaltpsychologie für die Psychiatrie und Neurologie.* (On the significance of gestalt-psychology for psychiatry and neurology.) *Psychiat. Neurol. med. Psychol., Leipzig*, 1957, 9, 39-47.—The relationship between psychiatry and psychology is contrasted to the inclusion within medicine of the other clinical and basic medical sciences. The concept of consciousness underlies the theory of gestalt-psychology which is briefly reviewed with special consideration of the work of Wertheimer, Sander, and Conrad. The hypothesis of constancy is modified and the problem of cerebral localization is considered.—C. T. Bever.

3037. Williams, Warren S. *Class differences in the attitudes of psychiatric patients.* *Soc. Probl.*, 1957, 4, 240-244.—Upper social class patients seem to take a rationalistic approach to living and to personal problems, precipitating factors in their illness are usually those involving status and prestige, and want to gain understanding and insight from psychotherapy. On the other hand, lower social class patients generally take a non-rationalistic, emotional, and supernaturalistic approach in solving their problems, precipitating factors in their illness are generally not those of status as much as inability to secure the physical necessities of life, and they usually view mental illness as a physical disability which can be treated as quickly as a wound. Since the psychiatrist represents an upper social class subculture he often has difficulty communicating with lower social class patients unless he uses methods which have meaning and significance to those patients.—R. M. Frumkin.

(See also Abstracts 2231, 2341, 2342, 2450, 2674, 2744, 2830, 2958)

MENTAL DEFICIENCY

3038. Baroff, George S. *Bender-Gestalt visuo-motor function in mental deficiency.* *Amer. J. ment. Defic.*, 1957, 61, 753-760.—"The Bender-Gestalt Test was administered to 84 twin individuals institutionalized in New York State schools for mental defectives. . . . In comparing our test data from apparently non-brain-injured defectives (endogenous) with previously reported findings on a similar series of defectives, agreement was observed in 3 areas; namely, mean Bender score obtained with the Pascal-Suttell scoring system; the correlation between Bender score and mental age; and the frequency of design deviations presumably associated with organicity. The agreement between these independent studies clearly indicates the feasibility of establishing clinically useful norms of Bender performance in the area of endogenous mental defect. Because of the significant relationship between mental age and accuracy of design reproduction, it seemed essential to present

quantitative data on Bender performance in seven mental age ranges, together with a detailed description of the qualitative deviations most frequently seen in these seven mental age groups. The breakdown of the endogenous series by mental age resulted in small N's at each MA level thus limiting our degree of generalization and demonstrating the need for a similar analysis in a larger series of cases."—V. M. Staudt.

3039. Courville, Cyril B. *Classification of mental deficiency on an etiological-pathological basis.* *Bull. Los Angeles neurol. Soc.*, 1957, 22, 10-19.—Detailed study of 114 cases, including autopsy findings, made over the years at an acute general hospital, provides the basis for a modification of the Tredgold (1908) classification system. In general, the concept of primary amentia is subdivided by the author into "essential genetic factors" and "indirect genetic disorders." It is concluded that antenatal and perinatal anoxia is responsible for the varied cerebral changes and the accompanying mental defect in those cases where "destructive lesions" are found.—L. A. Pennington.

3040. Cutts, Richard A. *Differentiation between pseudo-mental defectives with emotional disorders and mental defectives with emotional disturbances.* *Amer. J. ment. Defic.*, 1957, 61, 761-772.—This paper is "an attempt to find criteria for differentiating the pseudomental defective with emotional problems from the true mental defective with emotional problems. This differential diagnosis, when made, is usually in retrospect after repeated examinations; but to be able to make the differentiation on an original examination would be of benefit to all concerned. It is hoped that the most important impression that has been left is that a complete clinical study of each child referred for evaluation of intelligence is vital and that this is particularly so when there is evidence of an emotional problem."—V. M. Staudt.

3041. Ellis, N. R., & Sloan, W. *Relationship between intelligence and simple reaction time in mental defectives.* *Percept. Mot. Skills*, 1957, 7, 65-67.—Simple RT to an auditory stimulus was measured in 79 mental defectives who ranged in CA from 10.3 to 19.5 yr. and in MA from 3.7 to 12.2 yr. The correlation between MA and the mean of the total 12 trials was $-.54$. An r of $-.48$ was found between MA and the mean of the 3 lowest RTs. The relationships were found to be rectilinear and fairly independent of the regression of RT upon CA. RT tended to be more variable for low MA than high MA Ss.—C. H. Ammons.

3042. Freierov, O. E. *O patofiziologicheskikh mekhanizmakh oligofrenii.* (On the pathophysiological mechanisms of oligophrenia.) *Zh. vyssh. nervn. Deiatel.*, 1956, 6, 812-821.—Neurodynamic disturbances in debilitated oligophrenics were studied, utilizing Ivanov-Smolenskii's verbal-motor method as well as associative word tests. It is shown that in oligophrenics the "linking and synthesizing functions of the cortex" are greatly deranged, the processes of internal inhibition are disturbed, the nervous processes prove to possess considerable "inertness," and the activity of the second signal system is considerably affected. Pronounced underdevelopment of the second signal system is a general feature noted. Hence, the first signal system and, in serious cases,

also the subcortex dominant over the second signal system—a fact which is of considerable importance in understanding the major clinical features of the disease.—*I. D. London.*

3043. Goldberg, I. Ignacy. A survey of the present status of vocational rehabilitation of the mentally retarded residents in state-supported institutions. *Amer. J. ment. Defic.*, 1957, 61, 698-705.—“An attempt has been made to pull together the facts pertaining to the present status of vocational rehabilitation of the mentally retarded in state-supported institutions in the United States. An analysis of data received from a questionnaire completed and submitted by 52 of such institutions was made and is herewith presented, for interpretation and further action, to the members of the American Association on Mental Deficiency.”—*V. M. Staudt.*

3044. Horenstein, Simon. Reserpine and chlorpromazine in hyperactive mental defectives. *Amer. J. ment. Defic.*, 1957, 61, 525-529.—“A seven-month study was carried out to evaluate the effect of reserpine and chlorpromazine in a group of 36 hyperactive mental defective patients. Both drugs were found beneficial in curbing hyperactivity in a majority of cases. No significant difference in value could be observed between these drugs. In some instances improvement was maintained beyond pharmacologic expectations. The possible role of the brain stem in regulating motor activity and its relationship to hyperkinetic phenomena is mentioned.” 16 references.—*V. M. Staudt.*

3045. Howell, James E. Casework with retarded children in an institutional setting. *Amer. J. ment. Defic.*, 1957, 61, 592-594.—The author points out “that casework has a specific and important place in working with retarded children but that to be successful it must be done with the child, the parents, the community, and as an integral part of the total therapy of the training school. Casework helps to prevent a deficiency from becoming a handicap.”—*V. M. Staudt.*

3046. Keller, James E. The relationship of auditory memory span to learning ability in high grade mentally retarded boys. *Amer. J. ment. Defic.*, 1957, 61, 574-580.—3 groups of high-grade mentally retarded boys were given the digit span (DS) test under different motivational conditions. The following findings were reported: (1) the reliability of the DS test, with this population, was found to be higher than is usually reported. Altering the method of scoring produced reliabilities of the order of .90; (2) variations of the instructions to induce “test anxiety” failed to produce significant differences in DS performance; (3) the High DS group was found to be significantly superior to the Low DS group on the following WISC subtests—Arithmetic, Picture Arrangement, and Block Design; (4) the High DS group showed significantly greater gains in arithmetic achievement over a one year period. There was no difference between the groups on reading achievement; (5) the High and Low groups did not differ significantly on the Primary Mental Abilities reasoning subtests.”—*V. M. Staudt.*

3047. Kelman, Howard R. Some problems in casework with parents of mentally retarded children. *Amer. J. ment. Defic.*, 1957, 61, 595-598.—Some problems in casework with parents of mentally retarded children are discussed. Consideration is

given to the problems relative to the retarded child who remains in the community, living at home.—*V. M. Staudt.*

3048. McCoull, George, & Slupinski, Leon. The role of the clinical psychologist in a mental deficiency hospital. *Ment. Hlth, Lond.*, 1957, 16, 52-57.—Adequate psychological services in a mental deficiency hospital are examined in the light of new concepts of the treatment of mental defectives. A mental defective “whatever the chronological age, is a child, and as such has the same inalienable rights as possessed by any normal child to those services necessary to afford full development of such potential as he possesses.” The duties of a psychologist in initial assessment, evaluation of individual difficulties, recommendations for licensing, planning for education and training, cooperation with the medical staff, and teaching and research are enumerated and discussed briefly. A ratio of one psychologist to 250 patients is recommended.—*R. A. Hagin.*

3049. MacGillivray, Ronald C. Oligophrenia, cerebellar ataxia and cataract: The syndrome of Marinesco-Garland. *Amer. J. ment. Defic.*, 1957, 61, 719-724.—“The literature on the syndrome oligophrenia, cerebellar ataxia and cataract is briefly reviewed and the eponymous name Syndrome of Marinesco-Garland suggested for it. A further affected family is reported.”—*V. M. Staudt.*

3050. Molotkova, I. A. Uslovyne refleksy na posledovatel'nye kompleksnye razdrazhiteli u oligofrenov. (Conditioned reflexes to successive complex stimuli in oligophrenic patients.) *Z. vyssh. nervn. Deiatel'*, 1957, 7, 58-62.—“Complex synthetic activity” in oligophrenics was studied in the debilitated and imbecilic stages by means of the “motor method with verbal reinforcement.” Oligophrenics are shown to be classifiable into two groups: (1) those able to form a conditioned reflex to a successive complex stimulus and to give a correct verbal account, and (2) those unable to do so. The difference in the disturbances of higher nervous activity, so established, serves as a basis for a more exact classification of patients into the debilitated and the imbecilic. The most significant component in the successive complex stimulus, regardless of the intensity of its components, is the last component directly connected with verbal reinforcement.—*I. D. London.*

3051. Morris, J. V. The habit training of severely retarded defectives. *Amer. J. ment. Defic.*, 1957, 61, 474-477.—The author reports a specific habit training program for severely retarded patients and stresses the importance of housing in providing the ideal conditions for the training.—*V. M. Staudt.*

3052. Osterrieth, P. A. Le problème de l'examen psychologique dans la débilité mentale. (The problem of psychological examination in cases of mental deficiency.) *Cah. Pédag.*, 1956, 15, 109-120.—It is dangerous to base diagnosis of mental deficiency merely on a simple test that gives a mental age or an intelligence quotient. A complete examination of emotionality and character should be made. A suitable psychotherapy might be able to improve intellectual processes.—*R. Piret.*

3053. Papania, Ned. A qualitative analysis of the vocabulary responses of institutionalized mentally retarded children: Results for a high IQ group. *Amer. J. ment. Defic.*, 1957, 61, 522-524.—

The results of this study "seem to point to the existence of a group of children with Binet IQ of 80 and more whose handicaps are similar to those of a group of institutionalized mentally handicapped children of moron and borderline range. The similarity exists not only in the emotional, social and educational areas, but also in presumably significant intellectual functions, and this intellectual retardation does not seem to find adequate expression in some of the routine intelligence test results. Even in vocabulary, when scored in the usual way, i.e., quantitatively rather than qualitatively ('correct responses'), this 'high IQ' institutional group is probably not inferior to 'normal' children of the same M.A."—V. M. Staudt.

3054. Rosenblum, Sidney. **Ethnocentrism and intolerance of ambiguity in mentally retarded children.** *Amer. J. ment. Defic.*, 1957, 61, 567-573.—"The present investigation was devised to test the hypothesis . . . that a group of high-grade retarded white boys in residence at Wayne County Training School who scored high in the expression of ethnic prejudice . . . would be less able to tolerate the ambiguity inherent in a specially devised perceptual task than would a group of low-prejudice peers. . . . On the basis of performance with the Horowitz Faces Test, high and low prejudice groups were selected (20 white boys in each) and matched for chronological age, IQ, years in residence, and socio-economic status. The Decision-Location Test, a technique for measuring intolerance of ambiguity, was then administered individually to all subjects. Although analyses of data provided results of borderline statistical significance, differences between the groups were in the predicted direction and offered support for the hypothesis."—V. M. Staudt.

3055. Shafter, Albert J. **Criteria for selecting institutionalized mental defectives for vocational placement.** *Amer. J. ment. Defic.*, 1957, 61, 599-616.—This paper reports the results of a study to determine if the release characteristics used in the placement of institutionalized mental defectives differentiate successful from unsuccessful placements from the Woodward State Hospital. A prediction scheme is proposed. 45 references.—V. M. Staudt.

3056. Sloan, William, & Berg, Irwin A. **A comparison of two types of learning in mental defectives.** *Amer. J. ment. Defic.*, 1957, 61, 556-566.—Two techniques for studying learning processes in mental defectives are investigated.—V. M. Staudt.

3057. Smith, H. W. **A sheltered employment project in an institution for mental defectives.** *Amer. J. ment. Defic.*, 1957, 61, 665-671.—The author describes a program in which institutionalized mental defectives work at remunerative occupations after their day's duties. The manner in which they spend their earnings is also discussed. The emotional value of the work and the wages, and the value of the program as group therapy are stated.—V. M. Staudt.

3058. Sprogis, George R., Lezdins, Valdemar; White, Shirley D., Ming, Charles; Lanning, Mary; Drake, Miles E., & Wyckoff, Gertrude. **Comparative study on thorazine and Serpasil in the mental defective.** *Amer. J. ment. Defic.*, 1957, 61, 737-742.—The following results are reported for this study: "(1) While Serpasil appears to be more effective initially, both drugs are equally effective in tranquilizing the non-psychotic mentally retarded child.

(2) It is usually possible to tranquilize this type of patient with relatively low dosages. Thorazine appears to have a more lasting effect after the drug has been withdrawn. This may be due to an altered metabolism caused by Thorazine. (4) The total number of maximum restraints for this patient group reduced from 47 to 21. (5) Injuries to patients through self-abuse or aggressive behavior as well as property damage greatly reduced. (6) Since noisiness has been decreased to a great extent, all patients now enjoy more pleasant surroundings. (7) The amount of barbiturate sedation on the non-epileptic patients in this group decreased by 125 grains daily."—V. M. Staudt.

3059. Stern, J., & Lewis, W. H. P. **Serum proteins in mongolism.** *J. ment. Sci.*, 1957, 103, 222-226.—Serum albumin was decreased and serum gamma globulin increased in a group of 36 mongoloid children as compared with matched control group. 24 references.—W. L. Wilkins.

3060. Thomas, David H. H. **Cultural attitudes to mental subnormality.** *Amer. J. ment. Defic.*, 1957, 61, 467-473.—Throughout history social attitudes toward mental subnormality in different groups have varied. "A modern civilization needs the cultural orientation of recognizing that the problem of mental deficiency is not an isolated problem afflicting a small section of the community who happen by chance to be the parents of mentally inadequate offspring, but that this is an integral part of the anthropological structure of any race, and the measure of the success of that community in this integration may well play a vital part in its future virility and survival."—V. M. Staudt.

3061. Vance, Helen Sadie. **A psychological and educational study of brain-damaged and non-brain-damaged mentally retarded children.** *Dissertation Abstr.*, 1957, 17, 1033.—Abstract.

3062. Whitney, E. Arthur. **Mental deficiency, 1956.** *Amer. J. ment. Defic.*, 1957, 61, 656-661.—A review of the recent studies in the area of mental deficiency is presented.—V. M. Staudt.

3063. Wright, Stanley W., & Fink, Kay. **The excretion of beta-aminoisobutyric acid in normal, mongoloid and non-mongoloid mentally defective children.** *Amer. J. ment. Defic.*, 1957, 61, 530-533.—"Beta-aminoisobutyric acid (BAIB), a pyrimidine catabolic, was found in increased amounts in the urine of a number of Mongoloid patients, when compared to a group of normal children. The significance of this metabolic difference between these two groups is unexplained. Intermediate values were found for a group of non-Mongoloid mentally defective children." 16 references.—V. M. Staudt.

(See also Abstracts 2252, 2433, 2588, 2894, 3170, 3305, 3307, 3315, 3398)

BEHAVIOR PROBLEMS

3064. Zucchi, M., & Santangelo, F. **Accettazione e rifiuto delle bevande alcoliche in un gruppo di bambini con deficienza mentali di vario grado.** (Acceptance and rejection of alcoholic drinks in a group of children mentally deficient to various degrees.) *Arch. Psicol. Neur. Psich.*, 1956, 17, 1009-1021.—A group of 28 mentally deficient children in a psychiatric hospital were permitted to accept or

reject alcoholic drinks over a period of several weeks. All but one accepted alcohol, 17 to the point of drunkenness. The authors ascribe this behavior in large part to imitiveness, suggestibility, competitiveness, novelty, and lack of self-critical ability. There was no evidence that ingestion of alcohol correlated with degree of mental deficiency. English, French and German summaries.—E. Rosen.

3065. Adatto, Carl P. On pouting. *J. Amer. psychoanal. Ass.*, 1957, 5, 245-249.—In this patient the pouting seemed to be a wish for oral gratification and a reaction to frustration after having experienced adequate gratification during the oral period of development. The pouting represented a regressive wish to return to a state of satisfactory maternal contact.—D. Prager.

3066. Ahmad, Gulzar. Bachaaur Jhut. (The child and his lies.) *Nur-ut-Talim*, 1957, 7(2), 36-39.—In this paper children's lies have been psychologically interpreted.—A. H. Alawi.

3067. Anchersen, Per. Problems of transvestism. *Acta psychiat., Kbh.*, 1956, Suppl. 106, 249-256.—6 cases of transvestism examined by the author are briefly reported. 3 of them were charged with sexual delinquency. The relationship of transvestism with homosexuality and sexual delinquency is elaborated. 6 possibilities of treatment are listed, but only help and not cure can be strived for. 21 references.—R. Kaelbling.

3068. Battenberg, Ludwig. Untersuchungen über die männliche Onanie des Pubertätsalters. (Investigations on masturbation practices of males during puberty.) *Prax. Kinderpsychol. Kinderpsychiat.*, 1957, 6, 47-54.—Two statistical reports on the masturbation practices of two groups, 157 and 80 males between 14 and 18 years are presented. The reports are based on heretofore unpublished data obtained in 1939 by personal interviews with the subjects. The results are tabulated and discussed in detail.—E. Schwerin.

3069. Bergouignan, M. De quelques significations de l'angoisse en psychopathologie. (Concerning some of the meanings of anxiety in psychopathology.) *Ann. méd.-psychol.*, 1956, 1(5), 770-787.—Considering anxiety as a reaction of the whole organism against dangers seen as destructive to the ego, the author attempts to describe more specific aspects of anxiety, triggered by such stimuli as fear of physical destruction, fear of affective frustration and fear of devaluation of the self with accompanying loss of self-esteem.—M. D. Stein.

3070. Berkowitz, Morris I. A comparison of some ecological variables with rates of alcoholism. *Quart. J. Stud. Alcohol*, 1957, 18, 126-129.—Rank correlations of 10 ecological variables with rates of alcoholism in cities over 100,000 population yielded very low correlations. Reasons for these results are adduced.—W. L. Wilkins.

3071. Dalibard, Y. Autour de l'analyse d'un cas de fantasme sadique. (Concerning a case of sadistic fantasy.) *Rev. franç. Psychanal.*, 1957, 21, 35-63.—The analysis of a 30-year-old male is reviewed. Without sexual experience, the patient's sadistic and masochistic reveries fill dreaming and waking hours. Despite a brusque termination of treatment, the anal block is resolved with improved personality function.—G. Rubin-Rabson.

3072. Dellaert, R. De mythomanie bij het kind. (Mythomania in children.) *Tijdschr. Opvoedk.*, 1956, 1, 333-342.—A bibliographical review of the subject. An exposition of the views of different writers from Dupré to Klages. Case studies show interest in the structural-analytic method, which is renewing the meaning of psychiatric syndromes.—R. Piret.

3073. Dickel, Herman A., & Dixon, Henry H. Inherent dangers in use of tranquilizing drugs in anxiety states. *J. Amer. med. Ass.*, 1957, 163, 422-426.—The effects of tranquilizing drugs have been studied in 8,200 patients in whom anxiety was the chief finding. The danger to the patient's emotional health is shown by the finding of about 1,700 instances in which serious problems were created in essentially normal people and 827 instances in which emotional illness was aggravated. There is a grave danger to society in the idea that tensions should be reduced by techniques of relaxation and administration of drugs rather than by the constructive effort required for satisfying needs and removing dangers.

3074. Ends, Earl J., & Page, Curtis W. A study of functional relationships among measures of anxiety, ego strength and adjustment. *J. clin. Psychol.*, 1957, 13, 148-150.—S's were 63 hospitalized male alcoholics who were given the MMPI, three Q-sorts, and the Freeman Manifest Anxiety Scale (FMA) pre and post 15 group therapy sessions. An r matrix of pre, post, and difference scores—the difference between pre and post scores—is presented for the four scales derived from the MMPI—D, Pt, Taylor, Es—, the FMA, and the three Q-sort scores. "With the exception of the FMA, all relationships are in the expected direction." In general the correlations involving difference scores are less significant statistically than those involving raw scores. The test-retest self-correlations are not given.—L. B. Heathers.

3075. Ettlinger, Ruth, & Flordh, Per. Attempted suicide. Experience of five hundred cases at a general hospital. *Acta psychiat., Kbh.*, 1956, Suppl. 106, 300-301.—The patients were brought to the hospital mostly evenings at the rate of 1 a day, without discernible monthly, weekly, or public holiday rhythm. 47% attempted suicide as an affective act, only 3.8% had it well planned. 73% used barbiturates. Connubial and erotic problems predominated as regards motives. 58% of the attempts were life-endangering, only 7% completely harmless. 50% of the patients were admitted to psychiatric wards. 66% of the 500 had aberrant personality, 24% suffered from depressive states, 16.6% were psychotic. 29% had made previous suicidal attempts. Divorced persons and the age group 20-40 were more frequently represented than in the general populations of Stockholm.—R. Kaelbling.

3076. Falkey, D. Bruce, & Schneyer, Solomon. Characteristics of male alcoholics admitted to the medical ward of a general hospital. *Quart. J. Stud. Alcohol*, 1957, 18, 67-97.—Study of 316 patients on 11 social and other characteristics suggests that the alcoholic group differs from the parent population in any way in which the independent behavior of the alcoholic is involved. Nativity and religious affiliation, acquired at birth, do not distinguish the alcoholic from the non-alcoholic group but marital status, area

of residence, and occupation do. 23 references.—*W. L. Wilkins.*

3077. Gakkel', L. B. *Patofiziologicheskii mekhanizm i klinika sindroma naviazchivosti.* (Pathological mechanism and clinics of the compulsive syndrome.) Moscow, U. S. S. R.: Medgiz, 1956. 81 p.—The author presents clinical and experimental evidence and develops a theory to show that the "pathophysiological mechanism of compulsive phenomena" lies in "pathophysiological inertness of the process of excitation in various functional-dynamic loci—the 'sick points' of the cerebral cortex."—*I. D. London.*

3078. Grant, Vernon W. *Social growth deficit as a syndrome.* *Amer. J. Psychiat.*, 1957, 113, 924-927.—2 case histories are presented in support of the thesis that there are occasional instances of a reversal of relationship between personality setting and symptom, in which case the growth deficit of the patient's behavior contributes more largely to adjustment failure than do the manifestations of neurotic or psychotic processes.—*N. H. Pronko.*

3079. Haines, William H. *Some sexual deviations.* *J. soc. Ther.*, 1957, 3, 39-45.—"The purpose of this paper is to describe some of the cases of sexual deviation examined by the Behavior Clinic of the Criminal Court of Cook County." The cases were selected at random in the effort to portray the nature and scope of problems met by the Clinic.—*L. A. Pennington.*

3080. Hallgren, Bertil. *Enuresis: I. A study with reference to the morbidity risk and symptomatology. II. A study with reference to certain physical, mental, and social factors possibly associated with enuresis.* *Acta psychiat., Kbh.*, 1956, 31, 379-436.—These 2 papers are the precursor for the author's comprehensive monography (of 1957) on the clinical and genetic aspects of enuresis. Here he compared 219 7-year-old enuretic children with 177 nonenuretic children as to social group and intellectual level. As regards the other factors 152 enuretic children were compared with 152 control cases. He found a positive association between diurnal enuresis and mental disturbances. Enuresis was more frequent in the lower social strata. In some cases it started after a dry period in connection with disturbing environmental changes.—*R. Kaelbling.*

3081. Harris, Herbert I. *Telephone anxiety.* *J. Amer. psychoanal. Ass.*, 1957, 5, 342-347.—Castration anxiety persisting because of unresolved oedipal ties was found to be important in the resolution of each of 4 cases of telephone anxiety described. The mothers were aggressive and seductive while the fathers were passive and targets of intense hostility by their sons. Telephone anxiety may be polar to the excessive use of the phone by elated patients. The symbolic significance of the voice is probably phallic. "The forerunner of the system phone-voice may derive from the oral period when the infant's hand holds bottle or breast which become projections of the mouth system preceding developmentally the projective system of the fecal mass suggested by Abraham."—*D. Prager.*

3082. Hoffman, Mary Ellen. *An analysis of clients with character disorders.* *Soc. Casework*, 1957, 38, 126-132.—Following a discussion of a paper by Effie Warren on character disorders, the author presents two cases illustrating the diagnostic category

of passive-aggressive personality. These cases show differences as well as similarities in the behavior of marriage partners with personality disorders. If caseworkers know some of the common characteristics of people who have character disorders, the range of individual variations and the appropriate application of treatment guides, they will be able to give more skilled service to the large segment of their clients which fall into the category of "character disorders."—*L. B. Costin.*

3083. Hooker, Evelyn. *The adjustment of the male overt homosexual.* *J. proj. Tech.*, 1957, 21, 18-31.—30 male homosexuals were matched with 30 heterosexual males for age, IQ, and education. Their Rorschachs, TATs, and MAPS were given to two Rorschach experts and a TAT and MAPS expert for ratings of adjustment. The protocols were also presented in pairs to the judges to see if they could distinguish the homosexual and heterosexual protocols. Agreement between judges of the adjustment ratings was fair, but the Rorschach experts could not discriminate between homosexual and heterosexual protocols any better than chance. The TAT and MAPS protocols of the homosexuals could be distinguished far better than chance since nearly all the homosexual Ss gave at least one homosexual story. The two groups did not differ significantly in adjustment ratings. The author concludes: "1. Homosexuality as a clinical entity does not exist. Its forms are as varied as are those of heterosexuality. 2. Homosexuality may be a deviation in sexual pattern which is within the normal range, psychologically."—*A. R. Jensen.*

3084. Isbell, Harris; Belleville, R. E., Fraser, H. F., Wikler, Abraham, & Logan, C. R. *Studies on lysergic acid diethylamide (LSD-25): I. Effects in former morphine addicts and development of tolerance during chronic intoxication.* *A.M.A. Arch. Neurol. Psychiat.*, 1956, 76, 468-478.—To determine whether resemblance of the LSD reaction to the major psychoses, which are chronic diseases, would become more or less prominent when the drug was administered daily for 3 to 85 days to nonpsychotic Ss, former opiate addicts were studied. It was found that all changes in behavior increased with the LSD dosage and that the "development of tolerance was unequivocally established." It was also noted that the LSD reaction "when viewed in toto, had only a superficial resemblance to the chronic forms of any of the major psychoses." "The data shed no light on the mechanisms of the tolerance." 33 references.—*L. A. Pennington.*

3085. Klemperer, Edith. *Social anxiety, early sexual and aggressive theories as revealed through hypnoanalysis.* *Psychoanal. Rev.*, 1957, 44, 81-87.—A patient with social anxiety, alcoholism, and impotence was treated in 371 sessions including 122 hypnoses and hypnoanalyses. The visualizations of the patient revealed a negative reaction pattern to early environmental threats. His early sexual and aggressive theories shed light on the etiology of social anxiety.—*D. Prager.*

3086. Levin, Gid'on. *Al hahartava, metsitsat etsba vehapahad begil shel gan-yeladin.* (Enuresis nocturnal, thumb suckling, and fear in the nursery years.) *Ofakim*, 1956, 10, 375-378.—In 1953, 1,597 children (850 girls + 747 boys), 4-7 years of age, reared in 46 kibutsum (communal settlements) were

observed, in order to search the distribution of enuresis, suckling and fears, as well as the influence of educational factors on these phenomena. Nocturnal bed-wetting decreases during the nursery years; it is more widespread among boys than among girls. Thumb suckling is a frequent phenomenon in this age, and it is decreasing only in a little degree (47.4%-42.8%). Education is based neither on compulsion nor on a "laissez faire" approach, but rather on quiet and consequent explanation.—*H. Ormian.*

3087. Loewenstein, Rudolph M. A contribution to the psychoanalytic theory of masochism. *J. Amer. psychoanal. Ass.*, 1957, 5, 197-234.—The masochist stresses the denial of penislessness in women or denial of castration danger. The masochistic perversion originates in early traumatic events involving a mixture of prohibition, seduction, and reassurance. "The essential mechanism underlying the masochistic perversion is that, by inducing the sexual partner to enact a scene of castration threat or punishment, the masochist forces the prohibiting, threatening parent to annul and undo the rebuff and the castration threat through its simulated repetition while actually participating in the veiled incestuous gratification. The masochistic scene is thus a means of gratifying the forbidden, repressed incestuous fantasies but with the castration threat undone." 92 references.—*D. Prager.*

3088. Markowitz, Irving. Psychotherapy of narcolepsy in an adolescent boy: Case presentation. *Psychiat. Quart.*, 1957, 31, 41-56.—The problem in therapy was not so much to make the patient aware of why he feared castration but more to develop in the patient the capacity to risk activity in a discriminating way.—*D. Prager.*

3089. Money, John; Hampson, Joan G., & Hampson, John L. Imprinting and the establishment of gender role. *A.M.A. Arch. Neurol. Psychiat.*, 1957, 77, 333-336.—"Over a period of 5 years, we have made a comprehensive psychologic study of over 100 patients born with divers varieties of hermaphroditism. With rare exceptions, it was found that their gender role and orientation were consistent with their sex of assignment and rearing, even when the latter contradicted chromosomal sex, gonadal sex, hormonal sex, the predominant internal accessory reproductive structures, and the external genital morphology."—*L. A. Pennington.*

3090. Persky, Harold; Grinker, Roy R., Hamburg, David A., Sabshin, Melvin A., Korchin, Sheldon J., Basowitz, Harold, & Chevalier, Jacques A. Adrenal cortical function in anxious subjects; plasma level and urinary excretion of hydrocortisone. *A.M.A. Arch. Neurol. Psychiat.*, 1956, 76, 549-558.—The plasma level and urinary excretion were found 60% and 70% greater, respectively, in the 21 anxious Ss "on 'base day'" than in normal control Ss. The elevated blood and urine levels were maintained in the anxious Ss over the 4-day testing period. When a stress interview was administered to every anxious S on each of the last 3 days, it failed to increase significantly either the blood or urine hormone levels in the group. . . . When the stress days were segregated into high, medium, and low days for each S, the change in plasma hydrocortisone level was significantly greater on the day of the greatest increase in anxiety than on the day of least change in anxiety." These findings "are taken as

evidence that the adrenal cortex is secreting at a higher rate than in normal controls." 32 references.—*L. A. Pennington.*

3091. Robbins, Arthur. Emotional status of the U. S. soldier and length of tour in Korea. *U. S. Armed Forces med. J.*, 1956, 7, 888-894.—191 U. S. soldiers were administered a psychosomatic check list and the Thematic Apperception Test during the period of field duty following the cessation of hostilities. "Over-all personality characteristics, as measured by the experimental tools, did not seem to be markedly affected by the 16-month tour of duty. The factors of sexual identification, abasement, escape tendencies, and constriction remained relatively constant. There was some suggestion, however, both of a general increase in the soldier's aggressive impulses and of a decrease in affiliation needs as the tour progressed."—*G. H. Crampton.*

3092. Schenkel, R. M. Eine Kinderbehandlung. (A case of child treatment.) *Prax. Kinderpsychol. Kinderpsychiat.*, 1957, 6, 1-9.—A 9-10-year-old boy was treated with play techniques for an eating disturbance, difficulty with arithmetic despite good intelligence, headaches, hyper-sensitivity, and occasional temper tantrums. The case history, method of approach, and progress in treatment are presented in detail.—*E. Schwerin.*

3093. Schimmelpenning, G. W. Der Aufbau grob psychogener motorischer Störungen. (The structure of gross psychogenic motor disturbances.) *Z. Psychother. med. Psychol.*, 1957, 7, 52-67.—A study of persons erroneously referred to the writer's clinic as brain-damaged patients. Examination disclosed that the patients usually came from a traditional, lower-class way of life and were experiencing severe conflicts in changing milieu. Beginning with vegetative symptoms, the conflict finally broke out in gross motor symptoms. These were not cases of neurosis, but of massive conscious conflict with the environment. Thus a full cure could only be achieved through a real change of the patient's life situation. Cases with this kind of symptom require a multi-dimensional diagnosis since they do not fall under any of the existing diagnostic categories. 24 references.—*E. W. Eng.*

3094. Selzer, Melvin L., & Holloway, William H. A follow-up of alcoholics committed to a state hospital. *Quart. J. Stud. Alcohol*, 1957, 18, 98-120.—Social workers interviewed 98 patients 7 to 8 years after commitment—18 became abstinent, 16 became moderate drinkers, 18 died at an average age 20 years younger than current life expectancy. 29 references.—*W. L. Wilkins.*

3095. Sessions, Percy M. Ego religion and superego religion in alcoholics. *Quart. J. Stud. Alcohol*, 1957, 18, 121-125.—A case history is detailed to show that the long-range treatment of choice for selected alcoholics is neither medical nor religious but "spiritual" in an unstructured sense.—*W. L. Wilkins.*

3096. Smith, M. Effectiveness of symptomatic treatment of nailbiting in college students. *Psychol. Newsltr. N. Y. U.*, 1957, 8, 219-231.—"2 groups of college-student nailbiters, totaling 57 subjects, were taught the method of negative practice as an aid to symptomatic control of the nailbiting habit. In each, after 8 to 10 months, about half the subjects either were no longer biting their nails at all or had achieved

marked improvement in the condition of their nails." 2 control groups showed only 10 per cent improvement.—*M. S. Mayzner.*

3097. **Trice, Harrison M.** A study of the process of affiliation with Alcoholics Anonymous. *Quart. J. Study. Alcohol*, 1957, 18, 39-54.—Statements elicited in interview with AA members were put into true-false form and submitted to nonpsychotic alcoholic patients in a state hospital. Affiliation begins before the alcoholic ever gets to a meeting—it helps if he has favorable hearsay about AA, if he is sponsored and if the group exerts some pressure to keep him and if he has decided that the troubles in drinking outweigh the advantages.—*W. L. Wilkins.*

3098. **Vredenburg, Joseph.** The character of the incest object: A study of alternation between narcissism and object choice. *Amer. Imago*, 1957, 14, 45-52.—The shifting field between self and object is brought into focus as the organism seeks an object choice. "This shifting arises through the conflict between an individual's secondary narcissistic impulses and his close identification with his object choice." Examples are drawn from Waugh's "Brideshead Revisited."—*W. A. Varvel.*

3099. **Weiss, James M. A.** The gamble with death in attempted suicide. *Psychiatry*, 1957, 20, 17-25.—Individuals who attempt, or accomplish, suicide fall into 3 groups illustrated by case examples: (1) the aborted, successful suicide (so called because only aborted cases can be interviewed); (2) true suicidal attempts, where the individual gambles with the chances of death; (3) suicidal gestures. The dynamics of the true suicidal attempt are complicated, involving always a discharge of self-directed aggression, mostly an appeal for help, and occasionally a need for punishment and trial by ordeal.—*C. T. Bever.*

3100. **Wells, Roe E.** Use of reserpine (Serpasil) in the management of chronic alcoholism. *J. Amer. med. Ass.*, 1957, 163, 426-429.—A study was made of 145 ambulatory patients undergoing treatment for chronic alcoholism. A double-blind study with reserpine (Serpasil) and a placebo revealed that approximately half were significantly improved on reserpine therapy, one-fourth slightly improved, and one-fourth unchanged. Of the 33 patients receiving placebo therapy under the same conditions, 29 showed no significant improvement.

3101. **Welti, Walter.** Delirium with low serum sodium. *A.M.A. Arch. Neurol Psychiat.*, 1956, 76, 559-564.—Analysis of 27 surgical cases has indicated that delirium occurring 2 or 3 days after surgery may be associated with low serum sodium content in the blood and hence with behavior changes reversible by the administration of sodium. 3 case reports are given in which the physiology and the psychology of the problem are set forth.—*L. A. Pennington.*

3102. **Wenneis, Anne C.** Responding to the emotional needs of the alcoholic. *Soc. Casework*, 1957, 38, 189-193.—Because the alcoholic expresses his feelings by acting them out rather than by verbalizing, he places special demands on the skills and emotional resources of the social worker who must work with him. The purpose of this paper is to clarify the nature of these special demands. Topics discussed include the purpose of the intake interview, how the alcoholic will test the worker, the necessity

for quick, emotional response on the part of the worker's attitude toward drinking.—*L. B. Costin.*
(See also Abstracts 2891, 3032, 3064, 3120, 3124)

SPEECH DISORDERS

3103. **Glasner, Philip J., & Rosenthal, David.** Parental diagnosis of stuttering in young children. *J. Speech Dis.*, 1957, 22, 288-295.—996 parents of first grade children were interviewed by speech therapists with 153, or 15.4%, saying that their child had stuttered prior to entering school. Approximately 70% of the parents actively sought to correct the disturbance. There was a relationship between the active correction of the non-fluency and the perpetuation of the stuttering. Parents attributed the cause to emotional disturbances in 62% of the severer cases as compared to 29% and 9% for habit disorders and environmental influences. When emotional problems were said to be the cause, 41% were said to have stopped stuttering, whereas 82% of the stutterers thought to be reacting to environmental influences were said to have stopped.—*M. F. Palmer.*

3104. **Horowitz, Leola Schaper.** Attitudes of speech defectives toward humor based on speech defects. *Speech Monogr.*, 1957, 24, 46-55.—25 subjects in each of the following groups, articulatory, stuttering, and control, were used to determine the attitude of the speech defective and the nonhandicapped person in regard to humor based on handicaps in general and on speech defects in particular. Stutterers did not like jokes based on stuttering and felt they were more socially disapproved than the physically handicapped. Neither the articulatory subjects nor the controls showed this commonality of attitude.—*D. Lebo.*

3105. **Lerea, Louis.** Progress in speech therapy in relation to personality. *J. Speech Dis.*, 1957, 22, 155-160.—28 children, 17 with cleft palate, 8 with hearing losses, and 3 with cerebral palsy, and 26 of the mothers of these children were investigated by means of pre and post therapy recording of phonetically balanced lists of consonant sounds, both in isolation and connected speech. The results indicated that the residential six-weeks program for these children achieved a high degree of success. The California Test of Personality given indicated that the degree of improvement in speech was related to children's personality measures. Personality was not a critical determinant in the children's ability to improve their production of isolated consonants; and the personality of the mothers had no bearing on the success of therapy.—*M. F. Palmer.*

3106. **Leutenegger, Ralph R.** Adaptation and recovery in the oral reading of stutterers. *J. Speech Dis.*, 1957, 22, 276-287.—36 stutterers were studied on 2 consecutive readings of a 250-word reading passage. Only subjects who obtained a criteria of 10 or more words stuttered on the first reading and a reduction in frequency of words stuttered upon repeating the reading were utilized. 3 250-word experimental reading passages were constructed to provide approximately equal probability of stuttering. There was no evidence to support the hypothesis that longer Recovery Delay Intervals are accompanied by greater increments in recovery of stuttering response frequency.—*M. F. Palmer.*

3107. McIntyre, Barbara May. The effect of a program of creative activities upon the consonant articulation skills of adolescent and pre-adolescent children with speech disorders. *Dissertation Abstr.*, 1957, 17, 1152-1153.—Abstract.

3108. Schlanger, Bernard B., & Gottsleben, Robert H. Clinical speech program at the Training School at Vineland. *Amer. J. ment. Defic.*, 1957, 61, 516-521.—This special program is described in terms of diagnostic procedures, therapy, prognosis and recommendations, and therapy results.—V. M. Staudt.

3109. Shames, George H. Use of the nonsense-syllable in articulation therapy. *J. Speech Dis.*, 1957, 22, 261-263.—Using a jargon type of practice between the introduction of new sounds and the use of the new corrective articulatory sounds in continuous speech seems indicated from clinical experience.—M. F. Palmer.

3110. Shook, Andrew Woodson. Auditory sensitivity and speech defect: A comparative study of the incidence of selected factor of auditory sensitivity and defects of voice and articulation. *Dissertation Abstr.*, 1957, 17, 918.—Abstract.

3111. Stotsky, Bernard A. Motivation and task complexity as factors in the psychomotor responses of schizophrenics. *J. Pers.*, 1957, 25, 327-343.—Several tentative conclusions may be drawn from the findings: (1) impairment among psychomotor functions is not explainable in terms of a general factor such as motivational deficiency; (2) positive reinforcement tends to raise the level of performance for simple psychomotor tasks but is less effective for more complex tasks; (3) a remitted and regressed sub-group differed significantly on all psychomotor measures and manifested some differences in mode of response. 24 references.—M. O. Wilson.

3112. Surat, V. S. O vliianii funktsional'nogo sostoiianiia kory golovnogo mozga na sindrom motornoi afazii. (On the influence of the functional state of the cortex of the brain on the motor-aphasia syndrome.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 242-250.—Observations of subjects with motor aphasia resulting from vascular or infectious diseases of the central nervous system have shown that the clinical picture of speech disorders varies according as the functions of other parts of the cortex remain intact or are impaired. Where focal lesions of the speech-motor analyzer are unattended by prolonged and widespread cortical inhibition, restoration of speech is found to proceed without elements of infantile pronunciation.—I. D. London.

3113. Tonkonogii, I. M. O narusheniakh vysshei nervnoi deiatel'nosti pri dvigatel'noi afazii. (On disturbances of higher nervous activity in motor aphasia.) *Zh. vyssh. nervn. Deiatel'*, 1955, 5, 783-792.—2 groups are distinguished in those suffering from marked aphasia involving "expressive speech." In the first embolophasia (stereotyped inadequate vocal response to any question) is characteristic; in the second it is absent though spoken vocabulary may be limited to 5 to 10 words. Difficulties in the formation of conditioned reflexes to physical and verbal stimuli are noted in many of these aphasics. "The inhibitory processes in speech reactions in aphasics of the second group are much stronger than in those of the first group." In the

first group the "pathological forms of the inhibitory process bear a more limited and stable character."—I. D. London.

3114. Vanden Bulcke, M. Het onderzoek van dysphasie als taalverwervingsstoornis. (Research on dysphasia and troubles in the acquisition of language.) *Tijdschr. Stud.-Beroepsoriënt.*, 1956, 3, 60-70.—A study of disturbances in the acquisition of language. Diagnosis of deviations based on a general examination (medical, sensory, psychological, scholastic, and social) as well as an examination in the use of speech. Comments on therapy. Bibliography.—R. Piret.

3115. Watillon-Naveau, A. Aperçu sur la pathogénie de la dyslexie. (Survey of the pathogenesis of dyslexia.) *Rev. belg. Psychol. Pédag.*, 1956, 18, 37-44.—After giving a definition of dyslexia, the author makes a complete review of works that discuss this deficiency, starting with the first study by Berkhan in 1881. The principal theories of the pathogenesis are then presented and evaluated. The conclusion recommends an examination of the emotional problem in dyslexia, together with a study of some aspects of language, handedness, and spatial organization.—R. Piret.

3116. Wood, Nancy E. Causal factors of delayed speech and language development. *Amer. J. ment. Defic.*, 1957, 61, 706-708.—"Delayed speech development is a symptom of a problem that requires a coordinated testing program encompassing all known facets of child development. Single tests usable for young children are not discriminating enough at the present time, to differentiate causal factors when a severe delay in speech development is present. Classification of causal factors is necessary before therapy, treatment or interpretation of the problem is possible. Although the symptomatology of behavior might suggest that mental retardation is the causal factor for delayed speech development, further comprehensive evaluation may indicate that such factors as hearing loss, emotional disturbance or language disorders may be the true cause of the delayed speech."—V. M. Staudt.

(See also Abstracts 2705, 3308)

CRIME & DELINQUENCY

3117. Chaube, Saryuprasad. Aparadhi balakaran. (The causes of delinquency.) *Shiksha*, 1955, 8(2), 28-36.—The main causes are: bad health, bad moral atmosphere, unhealthy family conditions, bad economic conditions and individual factors including repression, feeling of inferiority, guilt feeling, emotional stress, and lack of motivation.—U. Pareek.

3118. Chwast, Jacob. A study of the relationship between boys' perception of parental attitudes and their predelinquency. *Dissertation Abstr.*, 1957, 17, 893-894.—Abstract.

3119. Cook, Joseph A., & Geis, Gilbert. Forum Anonymous: The techniques of Alcoholics Anonymous applied to prison therapy. *J. soc. Ther.*, 1957, 3, 9-13.—A social therapy program in operation at the Federal Reformatory, El Reno, Oklahoma, is described, its effectiveness evaluated, and plans for improvement set forth.—L. A. Pennington.

3120. Ellis, A. The sexual element in non-sex crimes. *Psychol. Newstr.*, N. Y. U., 1957, 8, 122-

125.—It is held that "Countless crimes that appear, on the surface, to be devoid of any sexual element are actually caused or instigated by the criminal's conscious or unconscious sex urges and needs." An analysis is made of non-sex offenses combining a significant sexual element with respect to 3 main categories and case summaries are presented in support of the analysis.—*M. S. Mayzner*.

3121. Falsberg, Martin. Setting limits with the juvenile delinquent. *Soc. Casewk*, 1957, 38, 138-142.—"Casework practice with the delinquent on probation respects the child's feelings and identity and has as a primary goal his eventual incorporation of necessary controls. Limit-setting is one of the major rehabilitative tools, rather than the goal, of correctional practice. Many of the child's basic feelings toward his parents, and therefore toward authority, can be worked through in the relationship with the probation officer who may also serve as an ego-ideal for him. Research is needed to explore further and to test out in practice the principles presented in this paper."—*L. B. Costin*.

3122. Held, F. Grundsätzliches zur Untersuchung und Beurteilung der kindlichen Glaubwürdigkeit. (Principles of examination and evaluation of trustworthiness of the child.) *Prax. Kinderpsychol. Kinderpsychiat.*, 1957, 6, 9-12.—Not one single factor but a multiplicity of related factors should be considered in the evaluation of a child's trustworthiness on the witness stand. The responsibility for the evaluation of the child's personality should rest with the child psychiatrist and psychologist. Some of the personality factors influencing a child's testimony may be: difficulty in perceiving reality accurately, reliance on fantasy, degree of suggestibility, inhibition, and general defensiveness. In evaluating these factors, the whole personality of the child should be considered, including developmental, constitutional, and environmental influences. 17 references.—*E. Schwerin*.

3123. Lee, Robert. The church and the problem of delinquency. *Relig. Educ.*, 1957, 52, 125-129.—Field work experiences of theological students in a program on "Church and the Problem of Delinquency" are described. New insights and some successful efforts at the rehabilitation of delinquents are related. Churches can help especially by giving adolescents a feeling of belonging. "If the church be sensitive to community needs, it will seek ways to sustain the needs of gang members and perhaps channel their activities toward constructive goals."—*G. K. Morlan*.

3124. Lieberman, Daniel, & Siegel, Benjamin A. A program for "sexual psychopaths" in a state mental hospital. *Amer. J. Psychiat.*, 1957, 113, 801-807.—A program is described for sex offenders at the Mendocino State Hospital in California. The pertinent California laws are outlined, including the determination of sexual psychopathy, the basis of jurisdiction, the court medical examination and qualification of examiners, the disposition of the sex offender, procedure for his release from the hospital and the voluntary commitment procedure.—*N. H. Pronko*.

3125. McGinnis, James E. Rehabilitation: A psychiatrist's view of the correctional institution program. *J. soc. Ther.*, 1957, 3, 19-26.—A con-

sulting psychiatrist describes the program operating in 3 California state correctional institutions and concludes that the efficacy is a function of the degree to which "the rehabilitation center is able to offer a program oriented directly in terms of training and treatment. . . ."—*L. A. Pennington*.

3126. Marchand, L., Loo, P., Duflet, J., & Eloy, G. Epilepsie tardive chez une criminelle atteinte depuis longtemps de désordres mentaux. (Late epileptic episodes in a criminal suffering from long term mental disorders.) *Ann. méd.-psychol.*, 1956, 2(1), 51-64.—For a long time, a similarity has been noted between epileptic states and certain intermittent psychotic and neurotic disorders, often considered as epileptic equivalents. Often, after years of such disorders, full blown epileptic attacks appear. The case of a patient, a 67-year-old woman, criminally insane, is given in detail to illustrate this point. 17 references.—*M. D. Stein*.

3127. Monahan, Thomas P. Family status and the delinquent child: A reappraisal and some new findings. *Soc. Forces*, 1957, 35, 250-258.—From an analysis of more than 44,000 cases disposed of in the Philadelphia Municipal Court in the period 1949-1954, it is concluded that "the stability and continuity of family life stands out as a most important factor in the development of the child." Strengthening and preserving family life, among those groups most in need, probably would accomplish more to ameliorate and prevent delinquency and other problems than any other single program yet devised.—*A. R. Howard*.

3128. Mundy-Castle, A. C. The EEG in twenty-two cases of murder or attempted murder: Appendix on possible significance of aliphoid rhythms. *J. nat. Inst. person. Res., Johannesburg*, 1956, 6, 103-120.—The EEGs of 15 Africans and 7 Europeans are presented. ". . . EEG abnormalities may be related to diminished culpability for capital crimes." 25 references.—*J. L. Walker*.

3129. Newman, Donald J. Public attitudes toward a form of white collar crime. *Soc. Probl.*, 1957, 4, 228-232.—A study of attitudes of the public toward crimes representing violation of the Federal Food, Drug and Cosmetic Act, revised 1938. Consumers reviewed 6 actual cases of food law violation and 78% felt that the penalties should have been more severe than the actual court decisions. However, the consumers felt that the penalties should not be as severe as for conventional crimes such as burglary and larceny.—*R. M. Frumkin*.

3130. Odum, Doris M. Problem families in Great Britain. *J. soc. Ther.*, 1957, 3, 27-38.—Broad characterization of "problem families" is given and followed by a description of the nature and functions of social agencies in relation thereto.—*L. A. Pennington*.

3131. Pothast, Miles Dale. A personality study of two types of murderers. *Dissertation Abstr.*, 1957, 17, 898-899.—Abstract.

3132. Robin, Ashley A., Liddell, Donald W., & Darby, C. Neurophysiological aspects of social behaviour. *Int. J. soc. Psychiat.*, 1956, 2, 33-39.—In this study the role of EEG changes has been investigated in 65 juvenile delinquent males. EEG abnormality is inversely related to the amount of social stress.—*R. M. Frumkin*.

3133. Schmitt, Robert C. Density, delinquency, and crime in Honolulu. *Sociol. soc. Res.*, 1957, 41, 274-276.—The author reports a close association between population density and juvenile delinquency and adult crime in Honolulu. His analysis is based on recent studies of juvenile offenders known to social agencies and prison admissions.—S. M. Amatoria.

3134. Short, James F., Jr. Differential association and delinquency. *Soc. Probl.*, 1957, 4, 233-239.—Sutherland's differential association hypothesis is tested by administering a scale to delinquents which measures the various dimensions of association. A consistent positive, significant relationship between delinquent behavior and delinquent association was found. While the findings must be regarded only as parameter values, they have important implications for research with respect to the general population.—R. M. Frumkin.

3135. Shulman, Bernard H. Group psychotherapy in a post stockade. *J. soc. Ther.*, 1957, 3, 14-18.—Voluntary sessions in the stockade at Fort Belvoir, Virginia, are described, the goals (largely Adlerian in systematic position), and the results are set forth. It is concluded that group sessions are of value in the military stockade.—L. A. Pennington.

3136. Trese, Leo John. Personality of the delinquent girl. *Dissertation Abstr.*, 1957, 17, 1269.—Abstract.

3137. Weiss, Sheldon W. The efficacy of isonicotinic acid hydrazid with schizophrenic criminals. *Dissertation Abstr.*, 1957, 17, 900-901.—Abstract.

3138. Younghusband, Eileen. The juvenile court and the child. *Brit. J. Delinq.*, 1957, 7, 181-195.—The judicial and treatment functions of the juvenile court system in England are discussed with reference to needs for improvement in procedures.—L. A. Pennington.

(See also Abstracts 2728, 3079)

PSYCHOSES

3139. Abély, Paul, & Rivaille, Chantal. La personnalité névrotique et psychotique du schizophrène. (The neurotic and psychotic personality of the schizophrenic patient.) *Ann. méd.-psychol.*, 1956, 2(3), 385-428.—Underlying the most acute psychotic symptoms, the authors find in schizophrenic patients a particular personality organization which they call "schizogenic" personality. In order to insure a lasting cure, it is important to understand the dynamics of this neurotic personality, the "kernel" of the disease. It is recommended that after the psychotic symptoms have subsided, the patient be subjected to intensive psychotherapy, preferably psychoanalysis. 30 references.—M. D. Stein.

3140. Alanen, Yrjö O. On the personality of the mother and early mother-child relationship of 100 schizophrenic patients. *Acta psychiat. Kbh.*, 1956, Suppl. 106, 227-234.—97 mothers of schizophrenics were interviewed by the author for an average of more than 2 hours. Special attention was devoted to the time of their child's oral stage. The majority of these mothers were "stiff and bitter," lacking "real naturalness and warmth," "inclined to anxiety and uncertainty," having "obsessive features" and a "domi-

neering and aggressive pattern." Psychoses of the parents, the mother's own youth, her marriage, the difference in the position of the siblings, are discussed. Patients with more severe schizophrenia, who had experienced an unfavorable course, had more disturbed mothers than those less severely affected with schizophreniform psychoses.—R. Kaelbling.

3141. Astrup, Christian. Experimentelle Untersuchungen über die Störungen der höheren Nerventätigkeit bei akuten und subchronischen Schizophrenien. (Experimental investigation of nervous system disturbances in acute and subacute schizophrenias.) *Psychiat. Neurol. med. Psychol., Leipzig*, 1957, 9, 33-38.—77 patients suffering from schizophrenia or schizophrenic-like psychoses of less than 5 years duration were examined with the same conditioned reflex tests as 122 chronic schizophrenics (*Psychiat. Neurol. med. Psychol.*, 1957, 9, 9-14.) The differential reactions of several subgroups are reported. 25 references. Russian summary.—C. T. Bever.

3142. Batt, J. C., Kay, W. W., Reiss, M., & Sands, Dalton E. The endocrine concomitants of schizophrenia. *J. ment. Sci.*, 1957, 103, 240-256.—Schizophrenia can be accompanied by normal, over- or under-function of thyroid. The 17-ketosteroid excretion rate in schizophrenics varies over a wider range than in the normal population, with paranoid schizophrenics having a higher rate than other schizophrenics.—W. L. Wilkins.

3143. Becker, Wesley C. A genetic approach to the interpretation and evaluation of the process-reactive distinction in schizophrenia. *J. abnorm. soc. Psychol.*, 1956, 53, 229-236.—The hypothesis tested was that schizophrenics manifesting the "process" syndrome show more regressive and immature thought processes than those showing the "reactive" syndrome. 24 male and 27 female hospitalized schizophrenics who were newly admitted served as Ss. Social history data were evaluated in terms of the process-reaction dimension and their psychological test results were evaluated for thought processes. Instruments used were the Elgin Prognostic Scale, Rorschach, and Benjamin Proverbs. A significant correlation was found between the Rorschach genetic level score and the Elgin Prognostic Scale for male and female Ss. Only for the male Ss was the hypothesis confirmed with the Proverbs test. 29 references.—A. S. Tamkin.

3144. Brockman, Robert J., Brockman, Jimmie C., Jacobsohn, Ulrich; Gleser, Goldine C., & Ulett, George A. Changes in convulsive threshold as related to type of treatment. *Conf. neurol.*, 1956, 16, 97-104.—26 chronic paranoid schizophrenic patients, 10 men and 16 women received 12 treatments (at 3 treatments per week) of one of the following: convulsive photoshock, subconvulsive photoshock or conventional electroshock. Thresholds were measured before the beginning and after the conclusion of the series by the amount of intravenous Azazol (4-cyclohexyl-3-ethyl-1,2,4 triazole) necessary to produce a seizure. The thresholds for women were found to be systematically lower than those for men. The greatest change in convulsive threshold was shown by patients who had received convulsive photoshock (mean increase from 31.2 to 75.6 mg. Azazol). Following electroshock the average thresholds also in-

creased (from a mean of 30.5 to 49.7 mg. Azazol). For subconvulsive photoshock, by contrast, the change was small (from 33.4 to 37.2 mg. Azazol) and statistically not significantly different from zero. There was no relationship between threshold changes and clinical improvement. The physiological, pharmacological and clinical implications are discussed. Discussion by E. Friedman.—*M. L. Simmel.*

3145. Cameron, D. Ewen; Levy, L., & Hunzinger, W. Intrathecal administration of hyaluronidase: Effects upon the behavior of patients suffering from senile and arteriosclerotic behavior disorders. *Amer. J. Psychiat.*, 1957, 113, 893-900.—The physiological and behavioral effects of intrathecal administration of hyaluronidase in 14 patients are presented and discussed. 22 references.—*N. H. Pronko.*

3146. Cross, K. W., Harrington, J. A., & Mayer-Gross, W. A survey of chronic patients in a mental hospital. *J. ment. Sci.*, 1957, 103, 146-171.—Study of patients in residence at least two years showed that many had no behavior problems and their stay was more related to social than to biological factors. Almost one-third had fairly important physical diseases, and the existence of such helps to keep them in hospital. Chronic schizophrenia accounted for 72% of the male and 66% of the female population.—*W. L. Wilkins.*

3147. Dahl, Nils L., & Odegard, Jan. On hereditary factors in functional psychoses. Preliminary report on a research project in two Norwegian mental hospitals. *Acta psychiat., Kbh.*, 1956, Suppl. 106, 320-335.—The study comprises 202 probands with functional psychoses and 11,143 of their relatives. The incidence of psychoses among the relatives is calculated for the different degrees of kinship, after the relatives have been divided according to certain qualities in the psychoses of the probands, such as diagnosis, syndrome, course of the psychoses, etc. A significant correlation exists between outcome of the psychoses in probands and their relatives and the incidence of mental illness among these relatives is much greater than in the general population, especially in manic-depressives and schizophrenics.—*R. Kaelbling.*

3148. DeVault, Spencer Harry. Physiological responsiveness in reactive and process schizophrenia. *Dissertation Abstr.*, 1957, 17, 1387.—Abstract.

3149. Ehrenthel, Otto F. Malignant tumors in psychotic patients: I. Studies of incidence. *A.M.A. Arch. Neurol. Psychiat.*, 1956, 76, 529-535.—The incidence of malignant tumors is determined in 1 hospital setting for a 3-year period (1951-1954). Statistics, when compared with national norms, indicate no significant difference between the sampled psychotic population and the "general population." It was also noted that the occurrence of cancer among "paranoids and among other schizophrenic groups did not seem to be different."—*L. A. Pennington.*

3150. Elmadjian, Fred; Hope, Justin M., & Freeman, Harry. Methacholine test and epinephrine and arterenol excretion: Hemodynamics of methacholine test and its relationship to excretion of epinephrine and arterenol (norepinephrine) in normal and schizophrenic subjects. *A.M.A. Arch. Neurol. Psychiat.*, 1957, 77, 399-405.—Experimental

study of 10 normal and 15 schizophrenic Ss indicated a positive correlation between the resting blood pressure and the excretion of norepinephrine. "Epinephrine excretion was positively related to area in chronic schizophrenic patients, with no relationship evident in the normal controls." These and other findings suggest that epinephrine or a metabolite thereof is "implicated in some manner to the depression of the excitability of the posterior hypothalamus in schizophrenia."—*L. A. Pennington.*

3151. Epstein, Joseph, & Wender, Louis. Alternating current vs. unidirectional current for electroconvulsive therapy—comparative studies. *Conf. neurol.*, 1956, 16, 137-146.—This is an analysis of the results of 806 patients with relatively early psychoses, 436 of whom were treated with alternating current and 370 with unidirectional current. "The recovery rates for the various psychoses were roughly parallel with the two methods." With unidirectional current one or two treatments more per series may be required than with AC current. There is some indication, though not statistically significant that paranoid types of involuntional psychoses and certain types of psychoneuroses may do somewhat better with AC treatment. Serious complications, particularly fractures, severe confusion and memory defects are greatly reduced by the unidirectional current technique. The implications for various types of patients are discussed.—*M. L. Simmel.*

3152. Eyres, Alfred E. A résumé of six fatalities in electric shock therapy treatment. *Conf. neurol.*, 1956, 16, 149-154.—A short history of each patient is given. Ages ranged from 24-69 years, diagnosis in 3 cases was schizophrenia, in the other 3 involuntional psychosis. Only one patient was in excellent physical condition prior to shock treatment. Types of shock administered, cause of death and treatment-expiration intervals are briefly discussed. "The death wish or the death anticipation or perhaps both should be considered in three of these fatalities." Discussion by D. J. Impastato.—*M. L. Simmel.*

3153. Fallik, A., & Treves, J. Unusual neurological complications due to largactil. *Conf. neurol.*, 1956, 16, 81-86.—"A case of paranoid schizophrenia treated with largactil is presented. After administration of 1,625 mg, signs of Parkinsonism appeared, after 2,180 mg, a left side hemiparesis developed, and, after a total of 2,355 mg, disturbances of the left V, VII, X, XII cranial nerves, suggesting a bulbar paresis, were observed. . . . 10 days after discontinuation of the drug a serious toxic hepatitis due to largactil developed. This diagnosis was confirmed by a liver biopsy. The authors are of the opinion that no largactil treatment should be applied in cases which previously suffered from liver disease." French and German summaries.—*M. L. Simmel.*

3154. Freeman, Harry, & Cline, Herbert S. Effects of chlorpromazine on chronic lobotomized schizophrenic patients: A controlled study. *A.M.A. Arch. Neurol. Psychiat.*, 1956, 76, 500-507.—"20 male lobotomized patients, hospitalized on an average of 10 years, were divided into 2 groups, matched for age, duration of hospitalization, years since lobotomy, and psychiatric status (Malamud-Sands Rating Scale). 1 was given the placebo and the other chlorpromazine by mouth on a double-blind basis. When the drug dosage was increased to 800 mg. daily, the scores on

the rating scales for the 2 groups were differentiated, the placebo group showing little or no change, whereas the drug group showed a significant trend to betterment in their scores." These and other findings are discussed with reference to studies dealing with the placebo where its psychological effect has not been counterbalanced by drug dosage.—*L. A. Pennington.*

3155. **Freeman, Thomas; Cameron, John L., & McGhie, Andrew.** *Chronic schizophrenia.* New York: International Universities Press, 1958. x, 158. \$4.00.—"This monograph is devoted to a clinical, interpretative, and therapeutic study of chronic schizophrenia" developed over a 2-year interval. The thesis, by reference to psychoanalytic tenets, is developed that schizophrenia results from a gross disturbance between the ego and the outside world. . . . "This disturbance in ego feeling is the central feature characterizing the disease process." The volume's 11 chapters present the authors' theory of mental functioning along with sections characterizing the psychopathology and symptomatology of the condition (confusion of identity, disturbances in perception, in thinking, in memory, for example). Chapter 10 sets forth the efforts and successes in treatment approaches to the patients selected for study. One major point is made on the role of the "mental nurse" in the rehabilitative process.—*L. A. Pennington.*

3156. **Frey, Torsten S:son, & Sjögren, Hakon.** *The EEG in presenile and senile patients.* *Acta psychiat., Kbh.*, 1956, Suppl. 106, 72-73.—The brain-recordings of 275 patients, 60 years of age or more, were evaluated with regard to occipital alpha frequency, absence of waves within the alpha band, degree of dysrhythmia, amount of beta activity, bursts, and focal abnormality. The findings are briefly reported for presenile or senile psychosis, dementia, paranoid psychotics, aphasia, depression, posttraumatic conditions and epilepsy.—*R. Kaelbling.*

3157. **Friedman, Emerick.** *Multipolar electrocoma therapy: VI. The use of four-lead prolonged electrocoma (PEC-4) in cases of acute and paranoid psychoses.* *Conf. neurol.*, 1956, 16, 146-148.—The technique of prolonged electrocoma administered through biparietal-bioccipital electrode placement is briefly presented and modifications of the treatment and their indications are discussed. Of 34 patients which have been so treated and followed for over five years, 29 have returned to and maintained their pre-psychotic vocational, scholastic and social status. 8 of 12 patients with paranoid conditions benefited from a more gradual tapering off to the maintenance doses, which is one treatment every 4-8 weeks.—*M. L. Simmel.*

3158. **Gastaldi, Gildo.** *Osservazione e critiche al concetto di schizastenia.* (Observations on, and criticisms of, the concept of "schizastenia.") *Arch. Psicol. Neur. Psich.*, 1956, 17, 1093-1116.—The concept of "schizastenia," invented by the Yugoslavian psychiatrist Dimitrijevic, is rejected. According to Dimitrijevic, there exists a special type of schizophrenia which develops from asthenia, is marked by asthenic symptoms, and is quite frequent. Instead it is maintained that the asthenic can develop in a number of psychological directions and that asthenia can not be considered a fundamental characteristic of schizophrenia. The complex development of asthenia

into schizophrenia is elaborated, and the relation of obsessional states to schizophrenia is discussed. English, French, and German summaries.—*E. Rosen.*

3159. **Ginsparg, Sylvia Levine.** *Post-partum psychosis.* *Dissertation Abstr.*, 1957, 17, 1124.—Abstract.

3160. **Gomirato, Giuseppe.** *Struttura della sintomatologia confusionale.* (The structure of confusional states.) *Arch. Psicol. Neur. Psich.*, 1956, 17, 1119-1143.—On the basis of an extensive critical review of existing theories concerning confusional states the conclusion is reached that true confusional states are caused by complex difficulties on both the somatic and psychological levels. These difficulties are so linked as to embrace the entire body and personality. They follow a typical symptom sequence and hence are usable for differential diagnosis of a variety of outward pictures of confusional states.—*E. Rosen.*

3161. **Gordon, M. H., Lindley, S. B., & May, R. B.** *A criterion measure of within-hospital change in psychiatric illness.* *J. clin. Psychol.*, 1957, 13, 145-147.—Ward movement of patients within a mental hospital was tested as a possible device for measuring change in psychiatric illness. Wards were rated by various staff personnel in terms of the mental status of the average patient on the ward. These ratings were found to be fairly consistent for different staff members, to be highly consistent on the average from year to year, to be significantly negatively related to the ward's Lorr morbidity score. A highly significant but moderately low r of $-.36$ was found between a patient's ward and his morbidity score for an N of 905.—*L. B. Heathers.*

3162. **Gunne, Lars-M., & Gemzell, Carl A.** *Adrenocortical and thyroid function in periodic catatonia.* *Acta psychiat., Kbh.*, 1956, 31, 367-378.—A case of periodic catatonia showed increases of the 17-OH-steroid level and of nonprotein nitrogen just before the disturbed period. The latter was reduced in the middle of the period. A case of aperiodic schizophrenia showed rapidly passing eosinophilia after thyroxine treatment but not the periodic changes as in the catatonia. In both cases plasma-levels of protein-bound iodine were fairly constant and the adrenal cortex responded poorly to ACTH. 29 references.—*R. Kaelbling.*

3163. **Hagenauer, F., Rudy, L. H., & Himwich, H. E.** *A comparative study of two central nervous system stimulants, MER-22 and S.K.F. No. 5, on chronic, blocked and withdrawn psychotic patients.* *Amer. J. Psychiat.*, 1957, 113, 840.—The differential effects on psychotic patients of two new drugs is discussed.—*N. H. Pronko.*

3164. **Hammes, Ernest M., Jr.** *Postoperative psychoses.* *J. Lancet*, 1957, 77, 55-60.—Postoperative psychoses include withdrawal psychoses in patients previously dependent on drugs or alcohol, toxic psychoses due to medication, psychoses caused by cerebral hypoxia, and functional psychoses precipitated by stress of surgery. The latter tend to run a prolonged course; the others tend to be acute and of short duration. Early diagnosis and treatment are important.—*G. K. Morlan.*

3165. **Hauck, Paul; Philips, Henry, & Armstrong, Renate.** *The effects of reserpine on psy-*

chotic patients of varying degrees of illness: A pilot study. *J. clin. Psychol.*, 1957, 13, 188-190.—"To determine how much change, if any, occurs in a psychotic population which has been treated with reserpine, and if such changes are fundamental ones in the personality adjustment patterns as revealed through projective tests, four groups of institutionalized patients representing three levels of illness were treated with oral and parenteral doses of reserpine for two months. An examination of scores of the Rorschach tests administered before and after treatment failed to show significant changes as did a larger test battery including the Rorschach, Figure Drawing and Bender-Gestalt which were judged qualitatively by three judges." S's were primarily schizophrenics though some organics were also included; N's of the five sub-groups—one main group had E and C groupings—varied from 9-17; each sub-group was either all male or all female.—L. B. Heathers.

3166. Holmberg, G., Jönsson, B., Mellgren, A., & Martens, S. EEG changes in chlorpromazine and reserpine treatment. *Acta psychiat., Kbh.*, 1956, Suppl. 106, 235-240.—15 psychotics were given up to 400 mgm of chlorpromazine per day. 6 schizophrenics received about 10 mgm reserpine in 2 daily I. M. injections for 40-50 days. Weekly EEG's and ECG's were taken before, during and after this treatment. Frequency was reduced most with chlorpromazine. This effect was less but cumulative with reserpine, the chlorpromazine effect seemed more rapidly reversible. Increase in amplitude, a habituation effect and some correlation with the clinical course were noted. Pulse frequency increased with chlorpromazine, while reserpine caused bradycardia.—R. Kaelbling.

3167. Keehn, J. D. Repeated testing of four chronic schizophrenics on the Bender-Gestalt and Wechsler Block Design tests. *J. clin. Psychol.*, 1957, 13, 179-182.—To illustrate the effect of learning and temporary conditions on test performance, four patients were tested 13 to 15 times with four-day intervals on two measures. The raw data are presented to show the changes in quality of performance and the variation of performance level from testing to testing.—L. B. Heathers.

3168. King, Gerald F., Merrell, David W., Lovinger, Edward, & Denny, M. Ray. Operant motor behavior in acute schizophrenics. *J. Pers.*, 1957, 25, 317-326.—"The following exploratory hypotheses were formulated . . . (a) severity of neuropsychiatric illness will be inversely related to rate of operant response, and (b) clinical improvement will be positively related to an increased operant rate. A personality organization-disorganization rating scale was constructed to measure severity of illness. . . . Neither hypothesis was supported. Further analysis of the data revealed a curvilinear relationship between severity of illness and operant rate."—M. O. Wilson.

3169. Kutin, V. P. K voprosu patofiziologicheskoi kharakteristiki khronicheskikh sostoianii shizofrenii. (On the pathophysiological characteristics of the chronic states of schizophrenia.) *Zh. vyssh. nervn. Deiatel.*, 1956, 6, 251-259.—2 types of chronic schizophrenics are discerned on the basis of higher nervous activity revealed: those in the "protracted" schizophrenic state and those in the "residual." In the former, new conditioned reflexes are

formed with difficulty as are differentiation, conditioned inhibition, etc. The latter do not exhibit these disturbances.—I. D. London.

3170. Lanzkron, John. The concept of pfpopschizophrenia and its prognosis. *Amer. J. ment. Defic.*, 1957, 61, 544-547.—Pfpopschizophrenia or hebephrenia imposed upon mental deficiency is discussed. Case histories are described. Prognosis is also discussed.—V. M. Staudt.

3171. Lassenius, Börje; Osterman, Einar, & Dimberg, Rune. Psychoses in the aged: A comparison between two series. *Acta psychiat., Kbh.*, 1956, Suppl. 106, 74-82.—Of 75 female patients, 65 years or more, with a variety of psychotic syndromes, 72% were treated with either electroshock under anesthesia, or chlorpromazine, or reserpine. 84% of them were discharged after 6 months, 37% were symptom-free, while in a control series of 75 untreated patients only 54% could be discharged and 9% only were symptom-free after 6 months. Mortality and duration of hospitalization diminished in the treated group. These good results were also observed in "arteriosclerotic insanity" but "senile dementia" was not included. There seemed to be virtually no somatic contraindications for electroshock under anesthesia in the aged.—R. Kaelbling.

3172. Lemere, Frederick. Failure of azacyclonol (Frenquel) to relieve non-experimental mental confusion and hallucinations. *Amer. J. Psychiat.*, 1957, 113, 840-841.—Experiences with 61 psychotic patients have led the author to the conclusion that Frenquel is clinically ineffective and should be discontinued.—N. H. Pronko.

3173. Levin, Max. Wit and schizophrenic thinking. *Amer. J. Psychiat.*, 1957, 113, 917-923.—Jokes often have a structure identical with the thinking disturbances of the schizophrenic, a fact which seems to have biological significance. Just as play increases the coordination of eye and limb, so wit gives practice in thinking and so adds to the capacity for adaptation.—N. H. Pronko.

3174. Liberson, W. T., Kaplan, J. A., Scherer, I. W., & Trehub, Arnold. Correlations of EEG and psychological findings during intensive brief stimulus therapy. *Conf. neurol.*, 1956, 16, 116-125.—"Intensive brief stimulus therapy was administered to 8 chronic paranoid schizophrenics during 60 therapeutic sessions, with a variable rate of treatments being utilized during four successive periods of therapy. . . . There was a definite variability in the effects of Intensive Brief Stimulus Therapy on psychological findings. Visuo-motor manipulative tests which involved a concentrated effort (dotting, digit symbol, series completion) within a time limit were most affected. More intellectual tests involving memory, vocabulary, and abstraction were affected relatively little. EEG changes were observed at a "saturation" level during the early stages of therapy. Frontal Delta and Theta changes were more persistent than the occipital alpha changes. Affective aspects of interpersonal relations improved at the early stages of therapy and remained improved for the duration of this study." Discussion by G. R. Hirschfeld.—M. L. Simmel.

3175. Mainord, Florence Rita. Parental attitudes in schizophrenia. *Dissertation Abstr.*, 1957, 17, 896-897.—Abstract.

3176. Merrell, David William. A perceptual study of deviant cognitive processes in schizophrenia. *Dissertation Abstr.*, 1957, 17, 1389.—Abstract.

3177. Meyer, R., & Sussmann, I. Psihoterapia k'vutsatit etsel holim psihotiyim. (Group psychotherapy with psychotic patients.) *Harefuah*, 1956, 51, 197-199.—A first report of an analytically oriented group-therapy with psychotic patients in Israel (9 members speaking Hebrew). The group feelings became slowly feelings of belonging to the group. The main subjects of discussion within the group were feelings towards authority, discrimination against patients and the need to be understood. A group of psychotic patients differs from a non-psychotic one by excessive sensitivity of its members, by their strong feeling of isolation, lack of self-confidence and confidence in others, and lack of spontaneity. The psychiatrist is both a leading member of the group and an interpreter of members' behavior. The trial is continued. English and French summary.—H. Ormian.

3178. Monroe, Russell; Jacobson, George, & Ervin, Frank. Activation of psychosis by a combination of scopolamine and alpha-chloralose. *A.M.A. Arch. Neurol. Psychiat.*, 1956, 76, 536-548.—Electroencephalographic and behavioral activation with the oral administration of the drugs to 127 Ss was carried out on a group of volunteers, neurological patients, and psychiatric inpatients. Selected results indicated that the psychotic behavior elicited was similar to that previously observed episodically in the patients studied. The evidence is said to support the concept that drug behavior activation "reflects an activation of the true psychological potentiality for psychotic behavior."—L. A. Pennington.

3179. Nordman, Lars Olov. Reversible symptoms in senile psychosis. *Acta psychiat. Kbh.*, 1956, Suppl. 106, 63-71.—First the author analyses the results of treatment with electroshock, Sevanil (preparation of inosinic acid and the anaesthetic vanilloyl diethylamide) and a combination of both in 126 cases with a diagnostic variety of over 9 presenile and senile psychoses. Then he gives a detailed report on the average age, the blood pressure, the condition of the heart and the creatinine clearance in these patients. Finally there is a review of the mortality and social prognosis in 276 women with presenile and senile psychoses treated as inpatients from 1945-1955. 24 references.—R. Kaelbling.

3180. Olson, Gordon Willis. The effects of success and failure instructions on the subsequent performance of schizophrenics and normals. *Dissertation Abstr.*, 1957, 17, 1127.—Abstract.

3181. Orgel, Sidney A. Differential classification of hebephrenic and paranoid schizophrenics from case material. *J. clin. Psychol.*, 1957, 13, 159-161.—"A behavioral rating scheme for the selection of hebephrenic and paranoid schizophrenic patients is outlined. Rater reliability of this scale proved high. Inter-judge tetrachoric r 's were $>.95$. Since the diagnostic criteria scheme is closely derived from the traditional and generally accepted descriptive nosology of psychiatric literature, it has generality of application while its nondependence on face-to-face patient contact has obvious practical advantages." The scale was tried out on 207 case histories which in-

cluded ten paranoid and ten hebephrenic cases. Each of two judges correctly identified 18 of the 20 cases.—L. B. Heathers.

3182. Orme, J. E. Initial psychiatric illness in involuntional women: II. Psychological aspects. *J. ment. Sci.*, 1957, 103, 227-239.—Standard interview, Rorschach, and TAT administered to 52 routine admissions of women in involuntional age range show that characteristics hitherto thought to be typical of mild or early melancholia are common to all women presenting psychiatric illness for the first time during this age range. 16 references.—W. L. Wilkins.

3183. Pachter, Maurice. A clinical evaluation of chlorpromazine therapy in chronic schizophrenics. *Amer. J. Psychiat.*, 1957, 113, 931.—A study is briefly reported that covered 28 months of experience with 190 hospitalized chronic schizophrenics treated with chlorpromazine.—N. H. Pronko.

3184. Pervov, L. G. Rechevaia metodika opredeleniia sostoiianiia vysshei nervnoi deiatel'nosti cheloveka. (A speech method for determining the state of higher nervous activity in man.) *Zh. vyssh. nervn. Deiatel'.*, 1956, 6, 329-332.—A method for "revealing more deeply disturbances of higher nervous activity [involving] chiefly the second signal system" in neurotics is described. "The essence of the method consists in the formation of a speech stereotype out of positive and inhibitory conditioned speech connections, which after its stabilization is subjected to alteration."—I. D. London.

3185. Ploticher, A. I. Metodicheskie varianty issledovaniia uslovno-rechevykh svyazei u psikhicheski bol'nykh. (Variants of methods for studying conditioned speech connections in the psychotic.) *Zh. vyssh. nervn. Deiatel'.*, 1955, 5, 832-843.—Certain methods for investigating conditioned speech connections, when utilized in combination with methods for studying the reactions of the first signal system or even unconditioned reflexes, are a useful supplement for the study of higher nervous activity in psychotics. The former are described, and word-lists, employed in the study, are presented.—I. D. London.

3186. Postel, J., & Cossa, P. La thérapeutique par la psychose induite. (Mescaline et Chlorpromazine.) (Therapy by means of induced psychosis. Mescaline and chlorpromazine.) *Ann. méd.-psychol.*, 1956, 2(2), 254-282.—A psychotic state induced by injections of mescaline is interrupted after an hour or 2 by an injection of chlorpromazine. This experiment, attempted in the hope of "shocking" schizophrenic patients out of their own delusions, was tried on 21 severely psychotic patients, with negative results.—M. D. Stein.

3187. Prince, Morton. The dissociation of a personality: A biographical study in abnormal psychology. (2nd ed.) New York: Longmans, Green, 1957. x, 575 p. \$5.00.—The first new printing of the second edition (1908) since 1930.

3188. Rafaelsen, Ole J., & Strömberg, E. Ten years' geriatrics in a Danish psychiatric hospital. *Acta psychiat. Kbh.*, 1956, Suppl. 106, 103-110.—The decreasing mortality of chronic psychotic patients is the most important cause of the increasing number of old patients in mental hospitals in Denmark. Thus schizophrenics and manic-depressives are the leading categories even among patients over 60. Only in the

sub-group over 70 do the arteriosclerotic psychoses and allied disorders become the dominating categories. Of the first admissions over 60 organic psychoses comprise two-thirds and 20% are endogenous psychoses, mainly manic-depressives and "paraphrenics."—*R. Kaelbling.*

3189. Reznikoff, Marvin, & Olin, Tom D. Recall of the Bender-Gestalt designs by organic and schizophrenic patients: A comparative study. *J. clin. Psychol.*, 1957, 13, 183-186.—50 schizophrenics and 33 organics—19 non-convulsive, 14 convulsive—were given the Bender and then asked to reproduce the designs. In general schizophrenics had higher Good Recall scores—no major distortions, omissions, rotations—than organics but, for the individual cards, this difference was significant on Card 2 only. They were not superior on Total Recall—the number of designs on which any portion of the design was recognizable—except on Card 2. Organics with and without convulsive disorders did not differ on any of the three recall measures used.—*L. B. Heathers.*

3190. Romm, May E. Transient psychotic episodes during psychoanalysis. *J. Amer. psychoanal. Ass.*, 1957, 5, 325-341.—The psychotic episode in each of 3 patients during therapy was a reactive formation to facing problems dealing with homosexuality. The psychotic episode was a defense mechanism against an ego-alien concept which came to the surface through the therapeutic process and which clashed with the ego and superego in a sensitized individual. There may be a therapeutic advantage in the psychotic explosion which unequivocally mirrors to the patient a deeper layer of his unconscious which he could not penetrate through free association and interpretation. The 3 patients functioned on a much higher level of emotional adjustment after the psychotic episode.—*D. Prager.*

3191. Ryan, Thomas J. Adjunctive therapy programs and behavior changes in chronic schizophrenic patients: An evaluation of behavior changes resulting from attention direction in adjunctive therapy programs. *Dissertation Abstr.*, 1957, 17, 810.—Abstract.

3192. Sabat, Charlotte. The mental patient released on a trial visit. *Soc. Casework*, 1957, 38, 81-86.—Describes how the trained caseworker can be effective in providing services for psychotic patients who have been released from the hospital on trial. Topics emphasized include understanding the patient, establishing a relationship with him, and working with relatives. The author concludes that these services have "helped patients stay out of the hospital and make varying degrees of satisfactory adjustment."—*L. B. Costin.*

3193. Sem-Jacobsen, Carl W., Petersen, Magnus C., Dodge, Henry W., Jr., Lynge, Harold N., Lazarte, Jorge A., & Holman, Colin B. Intracerebral electrographic study of 93 psychotic patients. *Acta psychiat., Kbh.*, 1956, Suppl. 106, 222-226.—A focus of arrhythmic activity of 2 to 4 cps in the ventral part of the frontal lobe has been demonstrated by depth electrography. Leukotomy limited to this region resulted in better clinical and less undesirable aftereffects. Synchronous 2 to 4 cps activity and paroxysmal waves were found in the parietal and the deep temporal lobes and in the hypothalamus. Extensive synchronous changes in the activity of these regions during acute

episodes of agitation or hallucination were also demonstrable. They could not be altered or reduced by activity or psychological means.—*R. Kaelbling.*

3194. Shatin, Leo. The influence of rhythmic drumbeat stimuli upon the pulse rate and general activity of long-term schizophrenics. *J. ment. Sci.*, 1957, 103, 172-188.—Schizophrenics do respond to the stimuli with increase in pulse rate and in general motor activity; motor responsiveness to the rhythms is correlated with general behavioral adjustment. 29 references.—*W. L. Wilkins.*

3195. Sjögren, Hakon. Neuro-psychiatric studies in presenile and senile diseases, based on a material of 1,000 cases. *Acta psychiat., Kbh.*, 1956, Suppl. 106, 9-36.—After a historical review on "geropsychiatry" the author uses the "Lillhagen classification" to relate his experiences and views on insufficiency presenilis, insania presenilis, atrophica cerebri, insania senilis, insania cum arteriosclerosi cerebri; psychosis endogenica, forma presenilis, and insania presenilis symptomatologica. The factors analyzed are: age at onset, frequency distribution, premorbid personality type, constitution and a variety of pathogenic and pathoplastic factors, especially many associated physical diseases. 167 references.—*R. Kaelbling.*

3196. Sugarman, Daniel A. The relationship of success and failure to the recognition and evaluation of self-products by normal and schizophrenic subjects. *Dissertation Abstr.*, 1957, 17, 1391.—Abstract.

3197. Sundby, Per. Occupation and insanity: The frequency distribution of psychosis within different occupational groups, with special reference to psychosis among ordinary seamen. *Acta psychiat., Kbh.*, 1956, Suppl. 106, 276-287.—In a clinical study 89 seamen show unfavorable loading with social and constitutional factors (e.g., broken homes, delinquency, school record, alcoholism, personality trends), but not as far as inheritance is concerned when compared with 178 controls. Almost all psychoses have a much higher frequency in seamen if compared with the admittance rates of other occupational groups in Norway. The main reason is a negative social selection, while environmental stress represents an important but secondary factor.—*R. Kaelbling.*

3198. Szasz, Thomas S. A contribution to the psychology of schizophrenia. *A.M.A. Arch. Neurol. Psychiat.*, 1957, 77, 420-436.—The thesis is developed that schizophrenia is a "particular mode of psychological organization whose most distinguishing feature lies in the schizophrenic ego's relationship to objects (people) and to symbols. . . . Schizophrenia is a state of (relative) deficiency of internal objects in the adult." This view is discussed also in relation to types of therapeutic approaches, psychological and physiological. 81 references.—*L. A. Pennington.*

3199. Tait, A. C., Harper, J., & McClatchey, W. T. Initial psychiatric illness in involuntarily women: I. Clinical aspects. *J. ment. Sci.*, 1957, 103, 132-145.—Clinical survey of 54 consecutive admissions of women showed remarkable absence of traditional pictures and the differences between depressive and nondepressive patients showed nothing but the presence or absence of endogenous depression. It is suggested that the nosology of involuntarily melan-

cholia needs some revision. 35 references.—*W. L. Wilkins.*

3200. Torghele, John R. **Premenstrual tension in psychotic women.** *J. Lancet*, 1957, 77, 163-170.—237 individuals (216 menstruating and 21 amenorrheic) showed cyclic behavior changes corresponding to the ovarian cycle. Out of 200 instances of assault and violent behavior, 184 occurred during the premenstrual tension period. "Noteworthy is the fact that cyclic behavior changes of the premenstrual tension type may persist in the absence of menstruation." Treatment was directed at the total psychobiologic unit.—*G. K. Morlan.*

3201. Ugelstad, Endre. **Chlorpromazine treatment in senile psychoses.** *Acta psychiat., Kbh.*, 1956, Suppl. 106, 60-62.—10 patients with "arteriosclerotic psychosis and 5 with senile psychoses" with an average age of 76 were treated an average of 42 days with up to 225 mgm per day of chlorpromazine perorally. One case of jaundice and one of erythema were the complications observed. 4 patients were much improved, 9 improved, 1 remained unchanged. This compares with control patients, who turned out 2, 5, and 7 in the respective identical categories.—*R. Kaelbling.*

3202. Usov, A. G. **Issledovanie induktsionnykh vzaimootnoshenii signal'nykh sistem u zdorovykh prestarelykh liudei i u bol'nykh starchykh psikhov.** (Study of inductive interactions of the signal systems in healthy aged people and in senile psychotics.) *Zh. vyssh. nervn. Deiatel'*, 1955, 5, 807-815.—Negative induction between signal systems is more expressed in the interaction of conditioned reflexes from different analyzers. In senile psychosis with meaningless speech there is to be found in the central nervous system a "functionally dynamic focus of inert excitation (particularly in the verbal system) which is connected with pathologically intense negative induction in the functioning of the first signal system with disturbance of the activity of the autonomic centers."—*I. D. London.*

3203. Venables, P. H. **A short scale for rating "activity-withdrawal" in schizophrenics.** *J. ment. Sci.*, 1957, 103, 197-199.—A ten item rating scale with most items modified from Maurice Lorr's work.—*W. L. Wilkins.*

3204. Venables, P. H., & Tizard, J. **Paradoxical effects in the reaction time of schizophrenics.** *J. abnorm. Soc. Psychol.*, 1956, 53, 220-224.—"A reaction-time experiment was carried out, using lights of different intensities, to test Pavlov's suggestion that paradoxical effects are commonly found in schizophrenics. It was predicted that whereas normal persons tend to respond more quickly to more intense stimuli, schizophrenics respond more slowly to such 'ultramarginal' stimuli than to lights of weaker intensity. In 22 out of 24 chronic, nonparanoid schizophrenics, RTs to the brighter stimuli were longer than those to weaker stimuli in a first testing session but not in a second. Convalescent, shore-stay schizophrenics and normal controls showed no paradoxical effects. A tentative hypothesis to explain why the chronic patients did not show paradoxical effects on retest is proposed."—*A. S. Tamkin.*

3205. Vinogradov, N. V. **Issledovanie izmenenii vnutrennego tormozheniia u bol'nykh shizofreniei v svyazi s klinicheskimi techeniem bolezni.** (Study

of changes of internal inhibition in schizophrenics in connection with the clinical course of the disease.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 801-811.—Modification of intensity of internal inhibition in schizophrenics was studied, utilizing Ivanov-Smolenski's "method of motor reflexes with verbal reinforcement." In the acute psychotic state the process of internal inhibition is weakened. When remission sets in, internal inhibition grows stronger and is restored. However, even in cases of improvement, the process of internal inhibition does not always irradiate "electively from the first to the second signal system."—*I. D. London.*

3206. Waldron, F. E. **Out patient treatment of schizophrenics.** *Int. J. soc. Psychiat.*, 1956, 2, 39-43.—Illustrates the significance of supportive therapy of the psychiatric social worker in the outpatient treatment of schizophrenics. Claims that readmissions of patients would decrease if P.S.W.s had more responsibility in caring for mild chronic cases.—*R. M. Frumkin.*

3207. Weiner, Herbert, & Schuster, Daniel B. **The electroencephalogram in dementia: Some preliminary observations and correlations.** *EEG clin. Neurophysiol.*, 1956, 8, 479-488.—In 71 patients with dementia of various etiology, 55 had abnormal EEGs. Of these, 52 showed non-focal slow waves and 3 fast records. There was a significant relationship between degree of dementia (defined as progressive involvement of categories of mental functions) and degree of EEG slowing.—*R. J. Ellingson.*

3208. Whitehorn, John C., & Betz, Barbara J. **A comparison of psychotherapeutic relationships between physicians and schizophrenic patients when insulin is combined with psychotherapy and when psychotherapy is used alone.** *Amer. J. Psychiat.*, 1957, 113, 901-910.—A series of 64 patients treated by psychotherapy and 45 receiving both insulin treatment and psychotherapy were studied as regards what takes place between physicians and schizophrenic patients in the two procedures. The results are compared and contrasted.—*N. H. Pronko.*

(See also Abstracts 2412, 2644, 2667, 2698, 2894, 2915, 2959, 2995, 3031, 3033, 3084, 3137, 3232)

PSYCHONEUROSES

3209. Alexander, V. K. **A case of phobia of darkness.** *Psychoanal. Rev.*, 1957, 44, 106-109.—The phobia of darkness and the fear of an evil spirit were due to the repressed oedipus situation. The origin and conception of Satan are the result of the repression and projection of the oedipus situation.—*D. Prager.*

3210. Arnhoff, Franklyn N. **A case of anorexia nervosa in a 16-year-old girl.** *J. clin. Psychol.*, 1957, 13, 194-196.—"A case history of anorexia nervosa with psychological test findings was presented and compared with previously reported test findings of five other cases. While the clinical syndrome is consistent with the literature, the psychological tests were as dissimilar from the previously reported five cases as they were from each other, giving further evidence for the contention that anorexia nervosa does not represent a psychological entity."—*L. B. Heathers.*

3211. Barbara, Dominick A. **Neurosis in speaking.** *Psychoanal. Rev.*, 1957, 44, 41-50.—Predomi-

nant types of neurotic speakers in our society are: (a) the man of a few words; (b) the stratosphere speaker; (c) the master's voice; and (d) the voice of the timid.—D. Prager.

3212. Bindra, Dalbir. **Psychotherapy and the recovery from neurosis.** *J. abnorm. soc. Psychol.*, 1956, 53, 251-254.—"Available evidence suggests that psychotherapy can be effective in alleviating minor maladjustments characterized by such objective states as 'unhappiness,' 'anxiety,' and 'tension' that often accompany neurosis. But the evidence does not yet support the view that psychotherapy is effective in relieving those gross and persistent maladjustments (neuroses) that are characterized by definite, palpable symptoms. Whether it has any effect on these is a question which only future research can settle."—A. S. Tamkin.

3213. Blackman, Lionel. **Clinical conference: Outpatient treatment via psychotherapy of a character neurotic with impotence.** *J. Hillside Hosp.*, 1957, 6, 107-119; 160-179.—The case of a 52-year-old, white, married minister with a 27-year history of impotence was presented December 11, 1955 at Hillside Hospital.—C. T. Bever.

3214. Carpelan, Henrik. **Operations in the histories of the neurosis material at the national pension institute.** *Acta psychiat., Kbh.*, 1956, Suppl. 106, 184-191.—Reviewed are the self-reported case histories of 1,989 women and 428 men between 18 and 68, who applied for a debility pension on the basis of neurosis. 25% of the women reported having undergone surgery. Of these 35% had gynecological, 26% upper abdominal, 18% thyroid and 21% other operations performed. 18% of the men had been operated upon. Theoretical considerations of the implications are discussed on the basis of 10 references.—R. Kaelbling.

3215. Eitinger, L. **A follow-up study of neuroses.** *Acta psychiat., Kbh.*, 1956, Suppl. 106, 265-275.—524 neurotics were treated between 1940-44. At the follow-up 10 years later 201 men and 265 women answered a questionnaire, 123 of them were examined personally. One-third was reported to have recovered or improved much, 21% showed some benefits, but 45% had not benefited or improved, had had relapses, or else were unable to work. These late results are contrasted with the more favorable immediate results at the time of hospitalization. "Hereditary predisposition," low level of intelligence and especially a "tainted premorbid personality" were connected with worse late results. Differences in treatment or diagnosis were not analyzed.—R. Kaelbling.

3216. Freedman, Lawrence Z., & Hollingshead, August B. **Neurosis and social class: I. Social interaction.** *Amer. J. Psychiat.*, 1957, 113, 769-775.—Data are presented from a psychiatric census of patients in private and public facilities in a New England University city of 250,000 population in 1950 to support a hypothesis that "certain psychological symptoms and interpersonal manifestations which are considered pathognomonic of neurosis may be intimately linked with the social class position and social role of the sufferer."—N. H. Pronko.

3217. Frumkin, Robert M. **Social factors in psychoneurosis.** *Ohio State med. J.*, 1957, 53, 415.—A study of Ohio State mental hospital patients suggests that all the factors indicative of social disor-

ganization and low socio-economic status are associated with higher rates of psychoneurosis.—R. M. Frumkin.

3218. Gabashvili, V. M. **K voprosu o klinike i patofiziologii pishego spazma.** (On the clinics and pathophysiology of the writing cramp.) *Zh. vyssh. nervn. Deiatel'*, 1956, 6, 234-241.—Clinical and experimental examination of patients with writing cramps lead one to believe that the neurosis, which the writing cramp represents, develops against a background of general "cortical neurodynamic disturbance" as a result of "overstraining the main nervous processes in a special part of the kinesthetic-motor analyzer" through fast or prolonged writing. In some cases "pain phenomena in the motor-support apparatus of the arm" are a contributing factor with formation of an "isolated painful spot" in the cortex. Treatment of the writing cramp should be concentrated on normalizing the "general cortical neurodynamics" as well as on local treatment. Sleep therapy may be applied with administration of sheath novocaine-blockade to the local processes. After treatment the patients may proceed to write exercises according to plan.—I. D. London.

3219. Højer-Pederson, W. **An attempt at evaluating the contents of the concept of actual neurosis.** *Acta psychiat., Kbh.*, 1956, 31, 447-458.—Actual neuroses (in adults) include traumatic neurosis and asthenic anxiety, dysphoric, apathic, psychosomatic, and certain hypochondriac syndromes. On the basis of their special clinics, dynamics, and genesis the author proposes "retention-neurosis" as a "more felicitous term" for them.—R. Kaelbling.

3220. Kononiachenko, V. A. **Fazovye sostoiianiia pri gipertonicheskoj bolezni.** (Phase states in hypertonic illness.) *Zh. vyssh. nervn. Deiatel'*, 1955, 5, 793-800.—After presentation of data on phase states in the hypertonic, it is concluded that the "study of vascular reactions and sleep inhibition in the hypertonic in order to elucidate phase states does not exclude, but presupposes, studies in the spheres of other manifestations of this illness in order to procure the fullness of the picture of the neurosis which constitutes hypertonic illness."—I. D. London.

3221. Loo, P. **Névroses et états névrotiques.** (Neurosis and neurotic states.) *Ann. méd.-psychol.*, 1956, 2(2), 227-253.—The author describes the various disorders traditionally called neurotic states and points to the ambiguity of the past and present classification. These neurotic states (often labeled neurasthenia) seem to differ from a "neurosis" by the fluidity of their structure and the preponderance of vague psychosomatic symptomatology. It is to be noted however that nosologic preoccupations should not obscure the complexity of the psychic structure and of the many elements contributing to the development of psychopathologic states.—M. D. Stein.

3222. Malmö, Robert B., Boag, Thomas J., & Smith, A. Arthur. **Physiological study of personal interaction.** *Psychosom. Med.*, 1957, 19, 105-119.—By recording speech muscle potentials, heart rate, and speech from 19 female neurotic patients while each was either praised or criticized by the psychologist relative to a story developed to a TAT card, there was found "differential physiological reactions to supportive vs. threatening situations, not only in the patients but also in the examiner. . . .

After the interviewer had been critical his tension remained high in contrast to the falling tension after he had praised." These and other findings are discussed in relation to the need for objective investigation of the interaction between patient and therapist.—L. A. Pennington.

3223. Stern, Adolph. The transference in the borderline group of neuroses. *J. Amer. psychoanal. Ass.*, 1957, 5, 348-350.—In deciding to treat a borderline patient analytically, the analyst must be willing to accept a role of being nurse or supporter. Through an experience with a parental substitute the patient comes to believe in the assured affective support. This type of patient must be helped to develop that kind of transference capacity that must exist if an attempt to analyze the patient is to be made. Then more consideration than usual must be given to the traumatic reactions in response to transference interpretations.—D. Prager.

(See also Abstracts 2371, 2891, 2982, 3031, 3033, 3139)

PSYCHOSOMATICS

3224. Chafetz, Morris E. Treatment of Parkinson's disease: A. Psychotherapy in Parkinson's disease. *A.M.A. Arch. Neurol. Psychiat.*, 1957, 77, 271-272.—Abstract and discussion.

3225. Driscoll, Patrick Joseph. Analysis of adjustment in the tuberculosis patient. *Dissertation Abstr.*, 1957, 17, 1380.—Abstract.

3226. Eisenberg, Ben C. Role of tranquilizing drugs in allergy. *J. Amer. med. Ass.*, 1957, 163, 934-937.—Many allergic patients fail to respond to the usual type of allergy management, and in most of these cases there is a large psychogenic component that must be treated before clinical improvement can be expected. Tranquilizing drugs provide available therapy to block certain interneuronal pathways adversely affected by anxiety and tension.

3227. Holmes, Thomas H., Hawkins, Norman G., Bowerman, Charles E., Clarke, Edmund R., Jr., & Joffe, Joy R. Psychosocial and psychophysiological studies of tuberculosis. *Psychosom. Med.*, 1957, 19, 134-143.—"Free association interviews were carried out on a random sample of 200 patients." The data collected indicated in the psychosocial sense that the Ss were sensitive, anxious, rigid, and emotionally labile, in many ways marginal people at time of onset. They started life with an unfavorable social status and grew up in an environment that was for them crippling." "Disintegration of the patient's precarious psychosocial adjustment almost invariably occurred in the 2-year period preceding the onset or relapse of disease." On the psychophysiological side, alterations in 17-ketosteroid excretion paralleled changes in the course of the disease and suggests that endogenous adrenocortical hormones influence resistance to tuberculosis. 53 references.—L. A. Pennington.

3228. Meerloo, Joost A. M. Human camouflage and identification with the environment; the contagious effect of archaic skin signs. *Psychosom. Med.*, 1957, 19, 89-98.—Fear melanosis, fainting, goose flesh, and various types of dermatoses are discussed in relation to a postulated archaic communication system, a forerunner of modern speech and ver-

bal communication. "This phylogenetic, older system of warning and communication still plays an important role in the symbolic function of organs and the way disease is used as a disguise or an appeal for help and pity." This set of clinical observations is presented "to open a chapter of clinical observation in which we need a more extensive study of phylogenesis and ontogenesis." 30 references.—L. A. Pennington.

3229. Meyer, Bernard C., & Lyons, Albert S. Rectal resection; psychiatric and medical management of its sequelae: Report of a case. *Psychosom. Med.*, 1957, 19, 152-157.—"A combined medical and psychiatric treatment of a depression consequent to a colostomy and an organic impotence following rectal resection for cancer in a 33-year old man is described. Emphasis is placed upon the importance of this phase of the therapy for surgically mutilated subjects."—L. A. Pennington.

3230. Schachter, M. Die neuro-psychischen Spätfolgen des frühzeitigen nicht-komplizierten Keuchsterns beim Kinde. (Neuro-psychological sequelae in uncomplicated pertussis in the child.) *Prax. Kinderpsychol. Kinderpsychiat.*, 1957, 6, 12-15.—It has been observed that frequently children who are referred for diagnostic evaluation and treatment because of behavior problems and poor school adjustment, showed a history of pertussis during the first 3 years of life. In all of these cases no emotional "complications" had been noted during the illness. 300 cases of this type were included in the present study designed to investigate the relationship between early pertussis and adjustment problems. The results are discussed.—E. Schewerin.

(See also Abstracts 2516, 2646)

CLINICAL NEUROLOGY

3231. Boles, Glen. Personality factors in mothers of cerebral palsied children. *Dissertation Abstr.*, 1957, 17, 893.—Abstract.

3232. Bonafede, Vincent I. Chlorpromazine (thorazine) treatment of disturbed epileptic patients. *A.M.A. Arch. Neurol. Psychiat.*, 1957, 77, 243-246.—Study of 165 disturbed patients ranging in age from 3 to 69 years and treated with thorazine for 2 to 12 months has shown that the "majority responded well" to this approach.—L. A. Pennington.

3233. Brock, Samuel, & Merwarth, Harold R. The illusory awareness of body parts in cerebral disease. *A.M.A. Arch. Neurol. Psychiat.*, 1957, 77, 366-375.—5 case reports of brain damage are reported. These are said to demonstrate the wide variation in clinical picture. It is concluded that careful study of the individual case, past and present, is essential before the meaning of the symptoms can be deciphered.—L. A. Pennington.

3234. Cruickshank, William M., Bice, Harry V., & Wallen, Norman E. Perception and cerebral palsy: A study in figure background relationship. Syracuse, N. Y.: Syracuse Univer. Press, 1957. 123 p. \$5.00.—Results on seven tests (Binet vocabulary, a tactual motor test, two disc tests, the Syracuse Visual Figure-Background Test, a marble board test, and a maze test) were obtained on 325 cerebral palsied children, aged 6 through 16. "The findings . . . are consistent with those of many previous studies in

showing impaired performance among the brain-injured and in finding developmental trends. The principal disagreement with previous studies is the low relationships obtained among the tests. . . . The present study tends to lead one to question the extent to which it is the deleterious effect of background which results in poorer performance. . . . The question arises as to whether it is not impairment of the ability to 'organize' individual stimuli into a whole which is of greater importance than the effect of background in impairing performance of the cerebral palsy children." 96-item bibliography.—*T. E. Newland.*

3235. Diller, Leonard, & Riklan, Manuel. Rorschach correlates in Parkinson's disease: M, motor inhibition, perceived cause of illness, and self-attitudes. *Psychosom. Med.*, 1957, 19, 120-126.—"42 patients were divided into high- and low-M groups on the basis of Rorschachs administered prior to neurosurgery. The groups did not differ significantly on degree of motor inhibition. However, the high-M group gave more psychological rather than impersonal causes of illness, as well as significantly more negative self-statements. . . . The person who sees M is the person who verbalizes a psychological cause and negative self-statements." These and other observations are discussed in relation to attitudes and physiological factors. 44 references.—*L. A. Pennington.*

3236. Eisenberg, Leon. Psychiatric implications of brain damage in children. *Psychiat. Quart.*, 1957, 31, 72-92.—"Treatment of the disorders associated with brain injury requires attention to biological, psychological, and social factors and is a challenge to the psychiatrist as a medical specialist. It serves to emphasize his need to comprehend the roots of behavior in the broadest sense if he is to discharge his function adequately. The reward he can hope to achieve is the restoration of a child to his full human rights." 76 references.—*D. Prager.*

3237. Golla, F. L., & Hodge, R. Sessions. Control of petit mal by acetazolamide. *J. ment. Sci.*, 1957, 103, 214-217.—Of 78 cases of all ages, all of whom had proved refractory to all varieties of treatment, only two failed to respond when the drug was added to their usual treatment, and 34 completely lost their minor attacks.—*W. L. Wilkins.*

3238. Halstead, H. Abilities and behaviour of epileptic children. *J. ment. Sci.*, 1957, 103, 28-47.—Fifty-six epileptic children were matched with controls. Test score deficits ranged from 7.7 points in mental arithmetic to 12.2 points on verbal intelligence. There is a higher incidence of behavior disorders, but these are related to brain injury, sex, precipitating circumstances, abnormal EEGs, type of seizure, longer duration of illness. 31 references.—*W. L. Wilkins.*

3239. Hill, Denis; Pond, D. A., Mitchell, W., & Falconer, M. A. Personality changes following temporal lobectomy for epilepsy. *J. ment. Sci.*, 1957, 103, 18-27.—Of 27 patients operated, five were rated as worse, but 18 as significantly improved, with improvement in psychological status being related to freedom from seizures. Lesions of the deeper temporal structures, particularly uncus, hippocampal gyrus, hippocampus, and amygdaloid nucleus, both experimentally and clinically appear to provoke epilepsy, and may also interfere with the regulating

mechanism with which the impulse life of the individual is managed.—*W. L. Wilkins.*

3240. Jordan, John Edward. An investigation of the nature of concept formation in cerebral palsied school children. *Dissertation Abstr.*, 1957, 17, 895.—Abstract.

3241. Morris, Arthur A. Temporal lobectomy with removal of uncus, hippocampus, and amygdala; results for psychomotor epilepsy three to nine years after operation. *A.M.A. Arch. Neurol. Psychiat.*, 1956, 76, 479-496.—A detailed followup of 36 patients, on the average of 5 years after the removal of 1 anterior tip of the temporal lobe in severe psychomotor cases, indicated "2 of 3 patients will gain a successful operation when all practical factors have been totally evaluated." 20 references.—*L. A. Pennington.*

3242. Perlstein, Meyer A., & Hood, Philip N. Infantile spastic hemiplegia: Intelligence and age of walking and talking. *Amer. J. ment. Defic.*, 1957, 61, 534-543.—"Intelligence, motor development and oral language development have been studied in a series of 334 infantile spastic hemiplegics. Some of the results of this study are as follows: (1) 28 per cent of the present series were mentally defective; (2) in the group of congenital hemiplegics and those postnatally acquired before time of walking and talking there was a delay of about 9 months from normals in walking and in first words, with sentence acquisition delayed six months; (3) sex differences in intelligence, walking, and talking were not discovered. Additional results are described in the paper. 45 references.—*V. M. Staudt.*

3243. Perrot, R. M., Florentin, M., & Florentin, C. Perversités précoces et Parkinson tardif. (Early perversions and late Parkinson syndrome.) *Ann. méd.-psychol.*, 1956, 2(4), 616-621.—The authors note the incidence of later Parkinsonian syndrome in certain cases of early psychopathic behavior. It would therefore seem justified to think of possible infectious neurological involvement in patients exhibiting early symptoms of perversions.—*M. D. Stein.*

3244. Roselló, Juan A. El síndrome cerebral crónico en los niños de Puerto Rico. (The chronic brain syndrome in Puerto Rican children.) *Pedagogia*, 1956, 4(2), 7-22.—On the basis of his experience as a psychiatrist, the author discusses pathological brain processes which do not result in paralysis or other serious manifestations, but which affect the brain in such a way that higher functions may be partially impaired. Symptoms such as hyperkinesis, destructiveness, impulsivity, aggressiveness, irritability, lack of social control, etc., are discussed. A detailed classification of the causes of the syndrome is included.—*E. Sánchez-Hidalgo.*

3245. Sauguet, H., & Delavey, R. Rôle des facteurs psychiques dans les convulsions infantiles et les paroxysmes épileptiques au cours de l'enfance et de l'adolescence. (Role of psychic factors in infantile convulsions and epileptic seizures during childhood and adolescence.) *Ann. méd.-psychol.*, 1956, 2(5), 754-827.—The authors investigate the psychological background of convulsive disorders, first in infants then in children and adolescents. The precipitating factors in 52 cases of infantile convulsions and 43 cases of children and adolescents' seizures are presented. The common denominator seems to be a

rupture of the usual mode of adaptation and a return to more archaic systems of defense. The part emotions play in the etiology of convulsive disorders seems to have interested a great number of researchers. Psychoanalysts, in particular, have given much attention to seizures, seeing in them a temporary total inhibition of the functions of the Ego and a return to an archaic mode of discharge; most generally noted is the mixture of murderous aggression and self-punishment expressed in the epileptic attack. 65 references.—*M. D. Stein.*

3246. Stevens, Janice R. The "march" of temporal lobe epilepsy. *A.M.A. Arch. Neurol. Psychiat.*, 1957, 77, 227-236.—Sequential content analysis of the attacks of 40 patients suffering psychomotor epilepsy has portrayed "certain patterns of seizure organization, suggesting an ordered 'march' of manifestations in convulsive attacks originating in the temporal lobes and environs." It is concluded that such an analysis may permit greater understanding of selected aspects of this condition.—*L. A. Pennington.*

3247. Stubblebine, J. M. Group psychotherapy with some epileptic mentally deficient adults. *Amer. J. ment. Defic.*, 1957, 61, 725-730.—"Six epileptic anti-social male patients in a chronic ward of a hospital for the mentally deficient were in group psychotherapy twice weekly for about six months. Four of the patients became better socialized during this period while two were unchanged. These four old and new in hospital, seemed to profit from the greater than average time spent with them in a group setting while searching for some measure of mutual understanding."—*V. M. Staudt.*

3248. Yates, Aubrey J. The rotation of drawings by brain-damaged patients. *J. abnorm. soc. Psychol.*, 1956, 53, 178-181.—2 hypotheses were tested with the Block Design subtest of the Wechsler Intelligence Scale and the Drawing Version of the Block Design Rotation Test: (1) Brain-damaged patients rotate significantly more than non-brain-damaged patients, and (2) The factors influencing rotation in the blocks test would be the same in the drawing version. Ss consisted of 20 brain-damaged patients, 25 non-brain-damaged psychiatric patients, and a control group of 25 normal persons. It was found that rotation effects in a drawing version of a task requiring the copying of designs discriminated between brain-damaged and non-brain-damaged Ss. The relative influence of the factors affecting the appearance of the rotation effect in all Ss was shown to be different in the drawing version than in the blocks version.—*A. S. Tamkin.*

(See also Abstracts 3061, 3126)

PHYSICALLY HANDICAPPED

3249. Bize, P. R. *Habilité et Malhabilité manuelle.* (Manual ability and disability.) *BINOP*, 1956, 12, 295-300.—The author discusses the problem of testing and understanding manual disabilities. He emphasizes the necessity of a thorough investigation as to cause of the disability and classifies such problems into those in which the cause is evident, such as injury or loss of a hand; and those in which the cause is not readily evident. This latter group includes such varied factors as brain damage, congenital neurological defects, or lack of training. Manual ability

appears to be a result of multiple components including capacity to direct and integrate its functions, and qualities of temperament or personality affecting the "vitality" or "style" of hand skills. More attention should be given to developing tests of manual abilities which will aid in diagnosing and evaluating these complex factors.—*F. M. Douglass.*

3250. Cath, Stanley H., Glud, Erik, & Blane, Howard T. The role of the body-image in psychotherapy with the physically handicapped. *Psychoanal. Rev.*, 1957, 44, 34-40.—In every physically handicapped person there are the problems of dealing with the trauma, the need to deny, the regression, and the depression. A person must come to terms with the discrepancy between this body image and his body structure. Therapy must cope with severe feelings of depression, guilt, and hostility associated with a distorted body and body image. The relatives must accept the patient's handicap and know its meaning.—*D. Prager.*

3251. Locke, Norman. Remarks on the psychology and the group psychotherapy of the hard of hearing. *J. Hillside Hosp.*, 1957, 6, 100-106.—The emotional reactions of the deaf and the problems in their psychotherapy are described. The technique of group psychotherapy, which promised special advantages despite the obstacle of communication, was attempted in an exploratory study. The group comprised 5 individuals, 4 in their fifth decade with deafness up to 80 decibel loss. At the end of 3 months, group psychotherapy proceeded successfully. It is recommended in the treatment of emotional disorders of the deafened. 15 references.—*C. T. Bever.*

3252. Mallinson, Vernon. None can be called deformed: Problems of the crippled adolescent. New York: Roy Publishers, 1957. x, 214 p. \$3.00.—The first part reports the life stories of 36 crippled children coming from a variety of homes and backgrounds, 10 of whom passed through adolescence without emotional disturbance, 15 recovered their former balance after some recognizable disturbance, and 11 failed to become socially acceptable. The second part attempts to discover the reasons for failure and success and the circumstances conducive to success.—*B. Lowenfeld.*

3253. Pasquasy, R. *Les incidences psychologiques du reclassement.* (The place of psychology in rehabilitation.) *Bull. Orient. scol. profess.*, 1956, 5, 112-115.—The social and vocational rehabilitation of people who are handicapped by war injuries or accidents is an important task, which requires continuous psychological supervision and also team work among specialists in readaptation: the physician, the psychologist, the social worker, the supervisor, and the placement officer.—*R. Piret.*

3254. Simmel, Marianne L. Phantoms in patients with leprosy and in elderly digital amputees. *Amer. J. Psychol.*, 1956, 69, 529-545.—"18 patients with leprosy were interviewed about phantom-experiences resulting from loss of limbs and digits following amputation and absorption." From these interviews and from a control group of 31 amputees it was found that the phantom-experiences appear following "traumatic or surgical amputation of digits" but not "from absorption of digits. . . ."—*R. H. Waters.*

(See also Abstract 3377)

EDUCATIONAL PSYCHOLOGY

3255. Archambault, Reginald D. The concept of need and its relation to certain aspects of educational theory. *Harv. educ. Rev.*, 1957, 27, 38-62.

—In this paper the author examines the ambiguity of the term, need, and analyzes the validity of the concept of need as a hypothetical construct. Murray's exposition is evaluated critically. As an alternative, an explanation close to Allport's principle of functional autonomy, and based on Woodworth's notion of the transformation of mechanisms into drives, is favored. Related concepts of equilibrium and value are discussed. Lists of basic needs in education must be formulated in relation to a specifically defined context, and must provide for a hierarchy of importance. 35 references.—R. C. Strassburger.

3256. Glick, Paul C., & Miller, Herman P. Educational level and potential income. *Coll. Bd Rev.*, 1957, No. 32, 29-32.—In 1949 the average income for men 45-54 years of age was \$3,112 for 8 years of schooling; \$4,519 for 4 years of high school; and \$7,907 for 4 years of college. The estimated "life income" for men in these categories was \$116,000; \$165,000; and \$268,000, respectively.—G. C. Carter.

3257. Jordan, Howard, Jr. The content of an introductory course in educational psychology in teachers colleges as determined by a critical analysis and evaluation of contemporary textbooks in the field. *Dissertation Abstr.*, 1957, 17, 808-809.—Abstract.

3258. Krugman, Morris. (Ed.) Orthopsychiatry and the school. New York: American Orthopsychiatric Association, 1958. xii, 265 p. \$4.00.—A wide variety of points of view and approaches are represented in these 26 articles on orthopsychiatry and the school. The articles are arranged in 5 sections: orthopsychiatry's help to education, orthopsychiatry and problems of learning, orthopsychiatry and school mental health, teacher education in mental health, and orthopsychiatry and adolescent problems. Most of the articles were first presented at the 1956 and 1957 annual meetings of the American Orthopsychiatric Association. The main purpose of the book is to increase rapport and understanding between educators and clinicians.—R. E. Perl.

3259. Natalis, E. Collaboration de l'école et de la famille. (Cooperation between school and family.) *Bull. Orient. scol. profess.*, 1956, 5, 147-157.—Cooperation between school and family cannot be fruitful unless the parent-educator relationship exists in an atmosphere of trust concerning reciprocal educational processes. Teachers should prepare families for innovations in teaching methods, and parents should encourage in their children attitudes of trust and respect for their teachers.—R. Piret.

3260. Newbury, Dorothy June. A search for the meaning of discipline in Dewey's theory of growth. *Educ. Theory*, 1956, 6, 236-245.—On the basis of a study of the writings of John Dewey, especially his analysis of "the growth situation," this paper takes exception to the principle expressed by some progressive teachers that classroom discipline is accomplished by simply "giving the child something to do which interests him." Interest, for Dewey, means seeing things in their connections and developing these in accordance with an aim or purpose. "To

know what to do and to move to do it by requisite means is to be disciplined." Discipline is more than interest; it is a quality necessary for the accomplishment of a purpose. "Discipline's real name is Inquiry."—A. E. Kuenzli.

3261. Pasquay, R. Une enquête sur la collaboration parents-école. (A study of parent-school cooperation.) *Bull. Orient. scol. profess.*, 1956, 5, 158-168.—A study by questionnaire, carried out in Belgium, showed, especially in comments accompanying the answers, that parents give attentive consideration to the problem of relations between family and school.—R. Piret.

3262. Wegener, Frank C. The organic theory of control. *Educ. Theory*, 1956, 6, 170-176, 191.—"Traditional" and "modern" conceptions of discipline are contrasted. The traditional view is inadequate because of its overemphasis on external control and extrinsic motivation while the modern view, developed by John Dewey, idealizes education in its overemphasis on internal control and intrinsic motivation. The organic theory holds that both views contain some validities and some invalidities and asserts the necessity of proportional increase of internal controls with increased maturation, experience, and education. Until pupils are mature enough to achieve intrinsic insights they must be provided with extrinsic directives or what Plato termed "right opinion."—A. E. Kuenzli.

(See also Abstract 2576)

SCHOOL LEARNING

3263. Blumenthal, Ralph H. The effects of multiple instruction upon learning in college physics. *Dissertation Abstr.*, 1957, 17, 819.—Abstract.

3264. Carrillo, Lawrence W. The relation of certain environmental and developmental factors to reading ability in children. *Dissertation Abstr.*, 1957, 17, 1251-1252.—Abstract.

3265. Eddings, Inez Clark. Patterns of reading growth: A longitudinal study of patterns of reading growth throughout the six grades in two elementary schools. *Dissertation Abstr.*, 1957, 17, 1253-1254.—Abstract.

3266. Enstrom, Eric Alfred. The extent of the use of the left hand in handwriting and the determination of the relative efficiency of the various hand-wrist-arm-paper adjustments. *Dissertation Abstr.*, 1957, 17, 1036-1037.—Abstract.

3267. Golan, Shemuel. Yomano shel ben eser. (A diary of a 10-year-old boy.) *Ofakim*, 1956, 10, 301-308.—A continuation of materials published in *Ofakim* (see e.g., 30: 694). A diary is given, written during about 4 months, and 2 phantastic stories. The external motivation to write the diary is stressed, as well as its author's activities, interests, self-estimation, judging ability, and impression by nature. All this on the basis of the data in the diary.—H. Ormian.

3268. Gray, William S. Summary of reading investigations July 1, 1955 to June 30, 1956. *J. educ. Res.*, 1957, 50, 401-441.—116 items are listed and summarized.

3269. Jiménez-Hernández, Adolfo. La psicología moderna y la lectura. (Modern psychology and reading.) *Pedagogia*, 1956, 4(2), 33-62.—An

analysis is made of the contributions of psychology to the reading process. 32-item bibliography.—*E. Sánchez-Hidalgo*.

3270. Kingston, Albert J., Jr., & George, Clay E. The effects of special reading training upon the development of college students' reading skills. *J. educ. Res.*, 1957, 50, 471-475.—Reading rate and comprehension scores obtained by Juniors were compared with scores on the same test obtained at entrance. Approximately half of these students had participated in a remedial reading program and half had not. Both groups improved significantly in rate, but the degree of improvement was greater for the participating group. The latter also improved in comprehension which the non-participating group did not.—*M. Murphy*.

3271. Lankford, Francis G., Jr., & Pattishall, Evan G., Jr. An experimental project in the teaching of arithmetic. Charlottesville, Va.: University of Virginia. Council for Educational Research of the Richmond-Petersburg Area, 1956. 69 p. \$1.00.—In this project, the teaching of addition and subtraction of fractions with the help of experimental materials emphasized 2 important features: (1) ideas and rules of arithmetic were developed inductively through pupil participation rather than the more usual method of teacher explained rule followed by practice; and (2) pupils were encouraged to learn arithmetic thoughtfully and independently using mental arithmetic with emphasis on varied approaches. Results demonstrated the experimental groups to be: (1) significantly superior in the mean number of correct answers on final achievement test; and (2) significantly superior in expression of arithmetical concepts through mental computation. Other significant results in achievement and expressed attitudes are discussed.—*V. M. Staudt*.

3272. Léon, A. Analyse de quelques mécanismes d'acquisition des premiers éléments d'un métier chez l'adolescent. (An analysis of certain mechanisms involved in learning the fundamentals of a trade in adolescent apprentices.) *Psychol. franç.*, 1957, 1 (2), 34-35.—Certain factors thought to be of importance in the effective learning of a trade skill in the apprentice are listed. "Intentional" and "incidental" influences are identified; the former are largely those associated with the formal aspects of the training, the latter with the general background and environmental features of the learning situation.—*B. A. Maher*.

3273. Mullin, Daniel W. An experimental study of retention in educational television. *Speech Monogr.*, 1957, 24, 31-38.—The determination of the superiority of home or classroom viewing in learning, retention, and the effect of motivation in these situations were investigated. The results of a 23 minute educational television program "produced according to as many of the tested principles of television instruction as could be followed within the framework of experimental conditions" indicated that neither the home nor the school environment was consistent in its effect on retention under different conditions of motivation. Motivation was significantly effective in increasing the retention scores of both home and classroom viewers.—*D. Lebo*.

3274. Mullin, Daniel Webster. Retention as a function of motivation and environment in educa-

tional television on the secondary school level. *Dissertation Abstr.*, 1957, 17, 1414.—Abstract.

3275. Quinn, Stanley Brittain. Relationships of certain personality characteristics to college achievement. *Dissertation Abstr.*, 1957, 17, 809.—Abstract.

3276. Shepherd, John R. A study of the characteristics of an audience viewing a specific telecourse. *Speech Monogr.*, 1957, 24, 21-30.—It is important for the instructor who teaches by television to analyze his audience. A number of demographic, background, and behavioral characteristics have some bearing on the general approach he might use. 256 viewers of a telecourse in algebra were sampled by means of a questionnaire. The results suggest that educational television audiences are different from the general television audience.—*D. Lebo*.

3277. Simms, Naomi. Analysis of characteristic factors of beginning reading programs. Volumes I and II. *Dissertation Abstr.*, 1957, 17, 1043-1044.—Abstract.

3278. Simon, J. French research in the teaching of reading and writing. *J. educ. Res.*, 1957, 50, 443-459.—During the period 1905 to 1940 the work of Binet and Simon and their disciples dominated the field. Since 1940 the influence of psychopathology has been pronounced. The work of leading contemporary research work in reading is summarized. Relatively little work has been done on writing. 38 references.—*M. Murphy*.

3279. Smith, James Glenn. A study of scholastic accomplishment in secondary school mechanical arts in relation to pupils' relative preference for this subject. *Dissertation Abstr.*, 1957, 17, 1014-1015.—Abstract.

3280. Spache, George. Personality patterns of retarded readers. *J. educ. Res.*, 1957, 50, 461-469.—Results of the administration of the Rosenzweig Picture-Frustration Study to 125 retarded readers were analyzed. 5 major personality patterns were discovered identifiable as follows: in conflict with authority figures, adjustive seeking only to be inoffensive, defensive, solution-seeking or peace-making, autistic characterized by blocking or withdrawal.—*M. Murphy*.

3281. Sparks, Paul E., & Fay, Leo C. An evaluation of two methods of teaching reading. *Elem. Sch. J.*, 1957, 57, 386-390.—A total of 824 pupils in grades 1 through 4 in two public elementary schools in Louisville, Kentucky were included in the experiment. One school used the "Phonetic Keys to Reading" method and the other the conventional "Basic Reading Program" method. The experiment was evaluated at the end of 4 years. Results are presented, conclusions drawn, and recommendations listed.—*S. M. Amatora*.

3282. Symonds, Percival M. What education has to learn from psychology: IV. Whole versus part learning. *Teach. Coll. Rec.*, 1957, 58, 329-339.—The literature on the whole versus part method of learning is reviewed for the guidance of educators.—*H. K. Moore*.

3283. Tribe, Edward Barrett, Sr. A readability formula for the elementary school based upon the Rinsland vocabulary. *Dissertation Abstr.*, 1957, 17, 788-789.—Abstract.

3284. Ulrich, John Holway. An experimental study of the acquisition of information from three types of recorded television presentations. *Speech Monogr.*, 1957, 24, 39-45.—This investigation determined "whether eighth grade pupils retained more information from observing a kinescope recording of a lecture without visual aids, one with aids handled by the lecturer, or the same lecture with aids that were merely flashed on the screen." The indications were that more information was recalled immediately from a kinescope recording of a lecture with poster type visual aids than from one without such aids. The manner of appearance of the visual aids had little effect on recall. Differences between lectures employing visual aids and those not employing them tended to disappear after 30 days.—D. Lebo.

3285. Walter, Verne Arthur. The effect of need for academic achievement on the performance of college students in learning certain study skills. *Dissertation Abstr.*, 1957, 11, 1384.—Abstract.

3286. Webb, Clarence E., & Siegenthaler, Bruce M. Comparison of aural stimulation methods for teaching speech sounds. *J. Speech Dis.*, 1957, 22, 264-270.—36 normal speaking children were taught to produce several 'new' speech sounds by 6 methods of aural stimulation. The mean number of correct responses made by the 18 subjects taught by each method for each sound was obtained, and the means for methods for sounds and for individual sound-method combinations were compared by inspection. There appeared to be considerable variation among the mean number of correct responses for the 3 sounds taught, and there seemed to be interaction between the sounds taught and teaching method. Teaching methods utilizing evaluation of a subject's response by a judge, especially if the evaluation were of a form to include verbal instructions as to how to make the sound, were the most effective.—M. F. Palmer.

(See also Abstracts 2294, 2848, 2997)

INTERESTS, ATTITUDES & HABITS

3287. Badt, Margit I. Attitudes of university students toward exceptional children and special education. *Except. Child.*, 1957, 23, 286-290, 336.—Anonymous questionnaires were administered to 210 university students. Students were asked to respond to which types of exceptional children were in most need of service, which in least need of service, which groups they would most like to teach and those they would least like to teach. The teachers ranked the maladjusted children as the children most in need of service and gifted children were ranked first in the least in need of service. However, the gifted child was ranked as the group the students would most like to teach and the maladjusted were ranked first on those that they would least like to teach. The author concluded that the needs of special education children are recognized, but that these college students would generally leave the necessary work with these children to others.—J. J. Gallagher.

3288. Barber, Theodore Xenophon. A note on "hypnotizability" and personality traits. *J. clin. exp. Hypnosis*, 1956, 4, 109-114.—Using the Guilford-Zimmerman Temperament Survey, significant correlations ($N=18$) were obtained between hypnotizability and "desirable character traits"; no relation

was found with maladjustment. The results suggest a "good guy" theory of hypnotizability: "The more hypnotizable [college] students tend to be . . . sociable, emotionally stable, non-submissive, non-hypersensitive, happy-go-lucky, and interested in overt activity."—S. Fisher.

3289. Drake, Joseph T. Some factors influencing students' attitudes toward older people. *Soc. Forces*, 1957, 35, 266-271.—The current notion "that more intimate contacts lead to a breakdown of unfavorable attitudes in minority racial and ethnic group relations cannot be carried over to apply to the feelings which college students in this sample (397 sociology students) seem to hold toward old people."—A. R. Howard.

3290. Innis, Robert W. A study of attitudes and interests concerning the Air Force as expressed by the cadets of the Michigan State University Air Force ROTC detachment. *Dissertation Abstr.*, 1957, 17, 779-780.—Abstract.

3291. Jacob, Philip E. Changing values in college: An exploratory study of the impact of college teaching. New York: Harper, 1957. xvi, 174 p. \$3.50.—This book reports on a study of values held by American college students as a result of social science education. Students are characterized as "gloriously" contented, unabashedly self-centered, show an easy tolerance of diversity although conformists themselves, value the traditional moral virtues although close to 50% admit cheating and are dutifully responsive toward government but are politically irresponsible and often politically illiterate. The main over-all effect of higher education upon student values is one of socialization rather than liberalization. The influence of the curriculum is more in the realm of changing interests rather than values. The impact of the instructor and teaching methods has relatively little effect on the value outcomes of general education. Some colleges do have a peculiar potency or moral climate for liberal education. This climate appears most frequently at private colleges of modest enrollment. Bibliography.—E. M. Bower.

3292. McCleery, Robert Lee. The formulation of a scale to evaluate the concern of high school boys for the solution of the developmental tasks appropriate to adolescence. *Dissertation Abstr.*, 1957, 17, 1266-1267.—Abstract.

3293. Mayer, John E. The self-restraint of friends: A mechanism in family transition. *Soc. Forces*, 1957, 35, 230-238.—88 college females were asked to indicate their reactions to a number of imaginary situations. Conditions are cited under which communication between friends tends to be curtailed and implications of this pattern of self-restraint are discussed.—A. R. Howard.

3294. Morris, Robert P. An exploratory study of some personality characteristics of gamblers. *J. clin. Psychol.*, 1957, 13, 191-193.—Maslow's S-1 Scale, the Dominance and Responsibility scales from the MMPI, and Golding's Happiness Scale were administered to 19 nongamblers and 29 gamblers, all Harvard undergraduates. Among the gamblers were 12 "thrill," 5 "economic," and 12 "other" gamblers. Comparisons were made between the gamblers and nongamblers and among the gambler subgroups. Although significant differences were found somewhat more frequently than one would expect by chance,

"differential patterns did not reach statistical significance."—L. B. Heathers.

3295. Ross, Edgar M. The social sensitivity of college students in judging their parents. *Dissertation Abstr.*, 1957, 17, 1128-1129.—Abstract.

3296. Seidel, Harry Edward, Jr. A study of selected factors in relationship to popularity. *Dissertation Abstr.*, 1957, 17, 1031-1032.—Abstract.

3297. Spacie, Edwin G. The structure of beliefs among selected college freshmen. *Dissertation Abstr.*, 1957, 17, 1383-1384.—Abstract.

3298. Straight, Glenn H. Identifiable personality characteristics resulting from membership in a conspicuous religious minority in public high schools. *Dissertation Abstr.*, 1957, 17, 810-811.—Abstract.

3299. Stroup, Herbert. Values and student activities. *Teach. Coll. Rec.*, 1957, 58, 316-322.—Research in the area of student activities suffers from the neglect of theory. Attitudes toward the relations between theory and research include stolid empiricism, positivistic reductionism, and value theory. Philosophy and theology can help in the validation of value.—H. K. Moore.

3300. Viitamäki, R. Olavi. Personality traits between puberty and adolescence: Their relationships, development and constancy with reference to their relation to school achievement. *Ann. Acad. Sci. Fenn., Ser. B.*, 1956, 104, 1-183.—Ss were 801 boys and girls of Helsinki high schools. High school girls were more sensitive, aesthetic, skillful and imaginative than high school boys. High school boys were more concrete, stereotypic, abstract, objective, and impulsive than high school girls. College (adolescent) boys were more rigid, persistent, vital, emotionally stable, introverted, and neurotic than college (adolescent) girls. The girls at this age were more flexible, responsive, abstractly and intellectually accurate, impulsive, emotionally emphatic, and destructive than boys. Factors with high or fair constancy from puberty to adolescence: girls—creative imagination, dynamic activity, impulsivity, seclusive emotion, affect lability, intellectual capacity and neurotic traits; boys—personality energy, tenacity of will, aesthetic interests, inner control, and abstract combination ability. Factors with low constancy: girls—sensitivity, controlled activity and esthetic combinative imagination; boys—none cited. 229-item bibliography.—M. O. Wilson.

3301. Whitmore, Paul Gordan. A study of school desegregation: Attitude change and scale validation. *Dissertation Abstr.*, 1957, 17, 891-892.—Abstract.

3302. Woodruff, Theresa A. The relationship between the social status structure of children's committees and certain aspects of the effectiveness of committee functioning: A study of sixteen committees of children in four fifth-grade classes concerning the relationship between the social status structure of children's committees and certain aspects of committee functioning. *Dissertation Abstr.*, 1957, 17, 1039.—Abstract.

3303. Zenti, Rico Nicholas. A comparison of the results obtained by the Mitchell and Kuder Interest Measures when administered to male

freshmen at the University of Michigan. *Dissertation Abstr.*, 1957, 17, 1265.—Abstract.

(See also Abstracts 2799, 3341)

SPECIAL EDUCATION

3304. Abraham, Willard. A hundred gifted children. *Understanding the Child*, 1957, 26, 116-120.—From a questionnaire survey of 100 gifted children, the following conclusions are offered. Their activities, interests, desires, and fears seem comparable to other children. They seem to enjoy physical activities and reading. Their adjustment seems to be good and they seem to be disciplined as other children. They like most teachers and seem to have happy homes somewhat enriched, but at present still not sufficiently stimulating.—W. Coleman.

3305. Benoit, E. Paul. Relevance of Hebb's theory of the organization of behavior to educational research on the mentally retarded. *Amer. J. ment. Defic.*, 1957, 61, 497-506.—Hebb's theory is explained and its relevance to the learning problem of the mentally retarded indicated. 40 references.—V. M. Staudt.

3306. Blessing, Kenneth R. An evaluation of special education services for educable retarded children with some suggested refinements. *Amer. J. ment. Defic.*, 1957, 61, 491-496.—Special education services for the mildly retarded are discussed in terms of major issues and problems facing educators of retarded children in the public schools today.—V. M. Staudt.

3307. Collmann, R. D., & Newlyn, D. Employment success of mentally dull and intellectually normal ex-pupils in England. *Amer. J. ment. Defic.*, 1957, 61, 484-490.—"The employment histories of 106 intellectually normal and 200 mentally dull male and female ex-pupils from five Secondary Modern Schools in South Essex were investigated, 2 to 3½ years being having elapsed since they left school. The percentage of those employed in skilled work increases steadily with IQ. . . . The percentage in unskilled work is reversed." Other results reported are: (a) no significant sex differences in employment success of the normal and dull; (b) the percentage of failures for normal and dull groups was negligible; (c) according to employers' statements the main reasons for failure and partial success for the normal and dull groups, given in order of importance, are character defects, inefficiency, temperamental instability, and home conditions. A similar result was obtained for the ESN (educationally subnormal) expupils.—V. M. Staudt.

3308. Diehl, Charles F., & Burk, Kenneth W. Evaluation of a special school for speech defective children. *J. Speech Dis.*, 1957, 22, 271-275.—34 speech defective children ranging in age from 5.5 to 10.5 years, and in grade placement from preschool to the 5th grade, were segregated for various periods of time into a special speech school operated by the Speech Center, Dept. of Psychology, at the University of Kentucky. At the beginning and end of each school year the children were given articulation, intelligence, and achievement tests. Statistically significant increases in speech improvement, school achievement, and intelligence scores suggest that the program was beneficial.—M. F. Palmer.

3309. Fiedler, Miriam Forster. Good and poor learners in an oral school for the deaf. *Except. Child.*, 1957, 23, 291-295; 330.—Teachers in a residential school rated 12 children as very good "learners," 12 very poor "learners" and 25 children fell into a classification of average "learners." These children were compared on a wide range of variables in an attempt to identify crucial characteristics separating good and poor learners. The good learners were characterized by higher socioeconomic status, general intellectual superiority, superior visual perception, more mature personality, and by a developmental history marked by fewer serious illnesses and accidents. The author calls for "more detailed clinical study of individual children."—J. J. Gallagher.
3310. Gallagher, James J., & Crowder, Thora. The adjustment of gifted children in the regular classroom. *Except. Child.*, 1957, 23, 306-312; 317-319.—A group of 35 children in grades two through five with Binet IQ's of 150 or above were studied in an attempt to discover what problems of adjustment they have within the regular classroom. The authors concluded that 29% of the present sample seem to be adjusting at a maximal level. Relatively few members of the sample were in serious academic social or emotional difficulty, but many seem to have problems of motivation, and lack expressive creativity or originality. Children coming from schools where there were few bright children showed more motivational problems than children coming from schools where there were many other bright children. The authors suggested that the extreme individual differences revealed in the study should not be used to justify action in but rather "to suggest various methods and procedures by which we may reclaim the intellectual potential of the most talented of the next generation."—J. J. Gallagher.
3311. Haan, Norma. When the mentally ill child returns to school. *Elem. Sch. J.*, 1957, 57, 379-385.—The author tells what has been done in the past 7 years in the Berkeley Public Schools wherein a number of formerly severely disturbed children have been successfully integrated into a regular elementary-school setting. The integration was achieved through a cooperative venture at which every step planned involved the teacher, the principal, the school psychologist, the child's therapist, and the parents.—S. M. Amatora.
3312. Haring, Norris G., Stern, George G., & Cruickshank, W. M. Attitudes of educators toward exceptional children. Syracuse, N. Y.: Syracuse University Press, 1958. xv, 238 p. \$5.00.—15 meetings devoted to exceptional children were held with the staffs of 4 schools, i.e., city, suburban, rural, and parochial. By means of a General Information Inventory, Classroom Integration Inventory, Activities Index, and a Picture Judgment Test changes in attitudes, understandings, and personality characteristics resulting from the workshops were investigated in this monograph. The teachers were found to be more accepting of exceptional children; teachers from schools with most handicapped children showed the greatest modification in attitude. No change in teacher personality was evident. "Apparently it is possible to effect modification in attitudes without resultant personality changes."—D. Lebo.
3313. Ramaseshan, Padmini Hannah. The social and emotional adjustment of the gifted. *Dissertation Abstr.*, 1957, 17, 1267-1268.—Abstract.
3314. Shatter, Florence. An investigation of the effectiveness of a group therapy program, including the child and his mother, for the remediation of reading disabilities. *Dissertation Abstr.*, 1957, 17, 1032.—Abstract.
3315. Smith, David W. Public schools and the mentally retarded. *Elem. Sch. J.*, 1957, 57, 375-378.—The author discusses the problems involved and the responsibility for the mentally deficient. If public schools are to confront continued demand, they should be more dynamic in their leadership and more certain in their goals. The article (1) reports studies from the current literature in this area; (2) discusses possible provisions that can be made by public schools to fulfill their stated aims and objectives; and (3) the need for further study and evaluation of the best approach to the education of the retarded child.—S. M. Amatora.
3316. Watkins, Harry L. Visual perception training for the moderately retarded child. *Amer. J. ment. Defic.*, 1957, 61, 455-460.—A perceptual training program at Polk State School is described in terms of basic concepts, habilitative objectives, the teacher-therapist, the classroom, methods and materials, differential classification, and group progress reporting.—V. M. Staudt.
3317. Woods Schools for Exceptional Children. Vocational guidance and rehabilitation of exceptional children. *Proc. Conf. Child Res. Clin. Woods Sch.*, 1957. 144 p.—The formal presentations reported are "The need for medical evaluation in vocational guidance and training" (Frederick A. Gibbs); "Vocational rehabilitation: an educator's critique on past, present and future programs" (Samuel A. Kirk); "Vocational rehabilitation: administration and program development" (local level by William Gellman, state level by John A. Kubiak, national level by Adaline Johnesse); "Vocational training and rehabilitation: current concepts in curriculum planning" (as regards the public residential school by Gareth D. Thorne, the public school system by Paul H. Voelker, the sheltered workshop setting by J. Clifford MacDonald, the private residential school by Raymond J. Gross, and the teacher training program by Abraham Jacobs).—T. E. Newland.

EDUCATIONAL GUIDANCE

3318. Barry, Ruth, & Wolf, Beverly. The genesis of guidance-personnel work. *Teach. Coll. Rec.*, 1957, 58, 382-396.—Discusses the background and beginnings of the guidance movement.—H. K. Moore.
3319. Chandler, John Roscoe; Beamer, George C., Williams, Charles C., & Armstrong, Vernon L. Successful adjustment in college. (2nd ed.) Englewood, N. J.: Prentice-Hall, 1958. v, 202 p. \$3.25.—Living and working with groups; learning what college has to offer; developing the skills you need for college work; finding time for all your activities; preparing daily assignments; taking notes you can use; preparing for and taking examinations; writing research papers; improving your reading; understanding your personality; developing a good personality; rating and dating; courtship and engagement;

planning for marriage; choosing a vocation; discovering vocational interests and aptitudes; planning your vocational program; working out a sound philosophy of life; and the directing force of a life philosophy are discussed. (See 26: 5828.)—G. C. Carter.

3320. Fouarge, G. *L'enfance inadaptée*. (Mal-adjusted children.) *Nouv. Rev. pédag.*, 1956, 11, 596-597.—In Belgium, as in other countries, 10 to 12% of the school children are scholastically mal-adjusted. The causes are physical, intellectual, characterological, or social. The principal problem to be solved in these cases is one of special education.—R. Piret.

3321. Froehlich, Clifford P. *Guidance services in schools*. (2nd ed.) New York: McGraw-Hill, 1958. ix, 383 p. \$5.75.—Designed as an introductory text (see 25: 3399), this volume covers guidance services in the elementary and secondary schools. The following topics are treated: basic services of a guidance program; guidance programs in action; organizing a guidance program; initiating an organized guidance program; the service of orientation; group methods in the information service; aids for the information service; studying the individual; the service of counseling; the service of placement; teachers and the guidance program; the guidance program and the curriculum; public relations and the guidance program; research and evaluation, and guidance services in elementary schools.—V. M. Staudt.

3322. Hatch, Raymond N., & Steffire, Buford. *The administration of guidance services*. Englewood Cliffs, N. J.: Prentice-Hall, 1958. ix, 499 p. \$6.50.—The personnel function in education is intended to assist students to become more self-directive and socially integrated. Pupil personnel services include guidance, health, pupil accounting, special psychological services, student and special group activities. Guidance is provided by the organization of five major services: inventory, information, counseling, placement, and follow-up. The initial chapter is devoted to an exposition of a point of view followed by one on the theory and practice of school administration. The third chapter provides a description of pupil personnel services with the fourth discussing organizational patterns and personnel. Administrative problems of guidance services is the next topic followed by a chapter on budget and facilities. Evaluation and improving guidance chapters conclude the first part. Part II contains three school case studies.—W. Coleman.

3323. Landurs, Wilfred Mason. *An historical study of the organization and development of student personnel services at the State College of Washington*. *Dissertation Abstr.*, 1957, 17, 781-782.—Abstract.

3324. Pasquasy, R. *Collaboration entre l'école primaire et l'orientation professionnelle*. (Cooperation between the primary school and vocational guidance.) *Bull. Orient. scol. profess.*, 1956, 5, 51-58.—The teacher has an important psychological mission, namely to observe his pupils. He should also awaken their vocational interests and in this way cooperate with the vocational counselor. This double responsibility requires some theoretical and practical training which should be given at the normal school.—R. Piret.

3325. Raub, Stanley Lamont. *Vocational adjustment problems of Middletown youth: Implications for improvement of the secondary school program in Middletown, New York*. *Dissertation Abstr.*, 1957, 17, 784-785.—Abstract.

3326. Schoenhard, George Henry. *Home visitation as a means of raising the academic attainment of high school students*. *Dissertation Abstr.*, 1957, 17, 1042-1043.—Abstract.

3327. Shaw, Martha Luelle. *The subsequent adjustment of first grade children in relation to age at entrance, socio-economic status, and type of pre-school experience*. *Dissertation Abstr.*, 1957, 17, 1014.—Abstract.

3328. Siske, James Harding. *The development of the guidance concept in the college social fraternity*. *Dissertation Abstr.*, 1957, 17, 805.—Abstract.

3329. Super, Donald E. *Education and the nature of occupations and careers*. *Teach. Coll. Rec.*, 1957, 58, 301-309.—Secondary schools point children toward middle class conceptions of occupations and careers, and neglect the needs of the 40% who will become semi-skilled or unskilled workers. The masculine concept of careers has also dominated education. Ten issues created by this situation are listed. 18 references.—H. K. Moore.

3330. Toby, Jackson. *Orientation to education as a factor in the school maladjustment of lower-class children*. *Soc. Forces*, 1957, 35, 259-266.—Compared with the lower-class child, the middle-class child has the following advantages in school: "(1) his parents are probably better educated and are therefore more capable of helping him with his school work if this should be necessary; (2) his parents are more eager to make his school work seem meaningful to him by indicating, implicitly or explicitly, the occupational applications of long division or history; (3) the verbal skills which he acquires as part of child training on the middle-class status level prepare him for the type of training that goes on in school and give him an initial (and cumulating) advantage over the lower-class child in the classroom learning situation; and (4) the coordinated pressure of parents, friends, and neighbors reinforce his motivation for scholastic success and increase the probability of good school adjustment."—A. R. Howard.

3331. Tolle, Donald James. *Identification of troublesome problems affecting St. Petersburg Junior College students, with implications for guidance program improvement*. *Dissertation Abstr.*, 1957, 17, 1262.—Abstract.

3332. Zaslany, A. *Hab'ayot hapsihiatriyot hak'rukhot bamaabar mehagan l'vet-hasefer*. (Psychiatric problems connected with transition from the kindergarten to the school.) *Harefuah*, 1956, 51, 227-229.—The discussed problem is: "The child's maturity to adjust himself to the demands of the class and the school," issuing from the differences between the kindergarten and the school. Due to the new demands, 10-16% of children remain for the second year in the first grade, a percentage higher than in other school grades of the primary school. The psycho-hygienic disadvantage of this situation is stressed, as well as the need to examine the intellectual and emotional maturity of children entering the

1st grade. It is necessary that all children attend a kindergarten; the first grade of the elementary school has to serve as a slow transition from the kindergarten to the school.—*H. Ormian.*

(See also Abstracts 2908, 3004, 3005, 3015, 3317)

EDUCATIONAL MEASUREMENT

3333. Beezhold, F. W. Factor analyses of language achievement tests. *J. nat. Inst. person. Res., Johannesburg*, 1956, 6, 63-73.—English and Afrikaans language achievement tests (reading comprehension, spelling, vocabulary, and grammar) were administered to 3 groups. "Within each language two independent verbal factors exist and" . . . "each language yields a verbal factor which is independent of that yielded by the other language. It is concluded that this verbal factor represents ability or achievement rather than genetically determined aptitude." 27 references.—*J. L. Walker.*

3334. Brooks, Keith. The construction and testing of a forced choice scale for measuring speaking achievement. *Speech Monogr.*, 1957, 24, 65-73.—On the basis of 133 items, obtained from student written essays on speaking habits of good and poor student speakers, 300 beginning speech course students evaluated particular classmates. From these items 26 pairs were selected for the forced choice scale. The forced choice scale seemed to have excellent potential when compared with a simple numerical scale.—*D. Lebo.*

3335. Carrier, Neil Alan. Stress, personality, and performance on course examinations. *Dissertation Abstr.*, 1957, 17, 1400.—Abstract.

3336. Clark, Glynn Edious. A comparison of the performance of selected pupils on the Davis-Eells Test and the Otis Test of Mental Ability. *Dissertation Abstr.*, 1957, 17, 807.—Abstract.

3337. Clark, Russell A., Teevan, Richard, & Ricciuti, Henry N. Hope of success and fear of failure as aspects of need for achievement. *J. abnorm. soc. Psychol.*, 1956, 53, 182-186.—3 classes of Swarthmore freshmen were given a level-of-aspiration questionnaire designed to give an independent measure of the hope of success (HS) and fear of failure (FF) continuum. The relations between this measure and total n Achievement and various n Achievement subscores were investigated. The findings were: "(a) Students at the extremes of the continuum have lower n Achievement scores than students in the middle of the continuum. (b) In terms of positive subscores (goal imagery) on the n Achievement measure, the extremes have higher scores than subjects in the middle of the HS-FF continuum. (c) In terms of negative subscores (deprivation imagery) the middle group tends to score more highly in the extremes."—*A. S. Tamkin.*

3338. Danielson, Lee Erle. Gambling proneness: Its measurement and expression in examination situations. *Dissertation Abstr.*, 1957, 17, 1379-1380.—Abstract.

3339. Dyer, Henry S., & Coffman, William E. The tests of developed abilities. *Coll. Bd Rev.*, 1957, No. 32, 5-10.—In planning the Tests of Developed Abilities it was felt that they should not impose any serious restrictions on the subject matter of secondary school curricula and that they should define

a number of different intellectual abilities which are important for the college preparatory student. The research involves extensive field trials. The tests have been administered to 3,000 secondary school seniors and 5,000 college freshmen. The data are now being analyzed.—*G. C. Carter.*

3340. Ebel, Robert L. Obtaining and reporting evidence on content validity. *Educ. psychol. Measmt.*, 1956, 16, 269-282.—The content validity of a test is determined by its relevance to the objectives of instruction. Good tests of educational achievement provide good operational definitions of the goals of instruction, and tests based on educational goals directly can influence teaching procedures constructively. There is no essential difference between the rational judgments involved in determining the content relevance of a test and those involved in determining the adequacy of criterion scores. All types of validity are based ultimately on the content validity of some measurement procedures.—*W. Coleman.*

3341. England, George William. The interest factor in undergraduate engineering achievement. *Dissertation Abstr.*, 1957, 17, 902-903.—Abstract.

3342. Fischer, H. Corrélations entre notes scolaires. (Correlations amongst school marks.) *Rev. belg. Psychol. Pédag.*, 1956, 18, 45-54.—From a detailed statistical study of school marks the author concludes that these marks seem to measure more nearly a general scholastic intelligence than any special aptitudes. Consequently, scholastic guidance cannot be based on marks. Only psychological methods can give the information needed for the guidance of the child.—*R. Piret.*

3343. Furst, Edward J. Constructing evaluation instruments. New York: Longmans, Green, 1958. xv, 334 p. \$4.75.—Determining what to evaluate; defining the behavior; selecting appropriate situations; getting a record; summarizing the evidence; planning the test; constructing items to fit specifications; constructing supply-type questions; constructing choice-type items; review, assembly, and reproduction; administration and scoring; and analysis and revision are discussed.—*G. C. Carter.*

3344. Garrison, Jesse Howard. The effect of the immediately preceding environment on student performance on standardized reading tests. *Dissertation Abstr.*, 1957, 17, 777.—Abstract.

3345. Gee, Helen Hofer, & Cowles, John T. The appraisal of applicants to medical schools. Evanston, Ill.: Association of American Medical Colleges, 1957. xix, 228 p. \$3.00.—A report of the 1956 AAMC Teaching Institute symposium covers: I. The broad perspective, background of the Institute, the origins and characteristics of professional students; II. The intellectual characteristics of applicants; III. The nonintellectual characteristics of applicants, appraisal of and the interview as a tool for selection, appraisal by formal psychological techniques; IV. Overall appraisal of the admissions process: typical admissions procedure, the student view of the medical admissions process, the undergraduate college view of the same, methods and goals of medical student selection.—*G. Rubin-Rabson.*

3346. Gowan, J. C. Intelligence, interests, and reading ability in relation to scholastic achieve-

ment. *Psychol. Newsltr.*, N. Y. U., 1957, 8, 85-87.—Correlations (for a sample of 100 women teaching candidates at UCLA) between each of the following, ACE, Kuder Preference Record, and Iowa Reading Test, with the Cooperative General Culture Test used as a measure of scholastic achievement indicates that scholastic achievement correlates highest with reading ability, less with intelligence (ACE) and least with interests (Kuder).—*M. S. Mayzner.*

3347. Helme, William H., Reuder, Mary E., Rosenberg, Nathan, Sprunger, James A., & Karcher, E. Kenneth. Prediction of success in ordnance courses. *USA TAGO Person. Res. Br. Tech. Res. Note*, 1956, No. 57. 19 p.—The 10 tests in the Army Classification Battery (ACB) and composites of scores on these tests were validated against final course grade in 2 samples of enlisted men in each of 13 courses ($N=90-767$) taught at Army Ordnance School. The best predictors of success in the supply courses were composites of the Arithmetic Reasoning Test, Reading and Vocabulary Test, the Mechanical Aptitude Test, or the Army Clerical Speed Test—unbiased estimates of validity ranging from .55 to .81; in armament maintenance courses, 2-test composites involving the Pattern Analysis Test—.20-.84; in automotive maintenance courses, 2-test composites involving the Automotive Information Test—.50-.86.—*TAGO.*

3348. Kubany, Albert J. Evaluation of medical student clinical performance: A criterion study. *Dissertation Abstr.*, 1957, 17, 1119-1120.—Abstract.

3349. Loret, Peter G., & West, Richard B. A longitudinal study of learning by medical students. *Calif. J. educ. Res.*, 1957, 8, 76-82.—The performances of 400 randomly selected and representative medical students on a 60-item test on the subject matter of cancer were analyzed for each of the four years in medical school. Chance-level performance was found at the freshman year, the greatest improvement during the sophomore and junior years, with a level-off in the senior year. Sub-analyses were made regarding questions pertaining to sites of cancer and with respect to diagnosis, characteristics and treatment, the greatest increase being found with respect to treatment.—*T. E. Newland.*

3350. National League for Nursing, Test Construction Unit. The use of tests in schools of nursing: The construction and use of teacher-made tests. New York: Division of Nursing Education, National League for Nursing, 1957. 102 p. \$2.50. (Pamph. No. 5.)—Some uses of tests; standardized vs. teacher-made tests; choosing methods for evaluation of student attainment; the essay test; objective tests; constructing test items based on the blueprint; assembling the test; scoring objective test; analyzing and interpreting test data; item analysis; analyzing and interpreting test scores; measures of central tendency; measures of variability; percentiles; percentiles of average scores; standard scores; tests as teaching aids; and grading are discussed. Bibliography.—*G. C. Carter.*

3351. Nicksick, Theodore, Jr. Relationship between aptitudes and major fields of study. *Dissertation Abstr.*, 1957, 17, 1030-1031.—Abstract.

3352. Patterson, C. H. Predicting success in trade and vocational school courses: Review of

the literature. *Educ. psychol. Measmt.*, 1956, 16, 352-400.—A comprehensive review of studies predicting success in trade and vocational schools is provided showing a range of criterion correlations from "highly significant to insignificant." Several reasons are suggested to account for the differences. Patterson concludes from his review of the literature that perhaps a combination of a verbal intelligence test, one of mechanical information or experience, a test of spatial ability, and possibly an interest test would be useful for predicting success in a trade school. 131 references.—*W. Coleman.*

3353. Schutz, Richard E. A factor analysis of educational development in the United States. *Educ. psychol. Measmt.*, 1956, 16, 324-332.—A factorization of 30 sociological, educational, and economic variables measured for the 48 states of the United States as of 1950 has yielded four oblique factors. These were urbanization, administrative organization, intellectual climate, and technological advances and lagging social institutions. The first 3 factors are consonant with previous factor analytic findings but the 4th has little substantiating evidence from previous studies. Extensive verification through P and R-technique studies at different administrative levels are recommended.—*W. Coleman.*

3354. Stinissen, J. De waarde van de Progressieve Matrices 38, een nieuwe vorm voor de lagere school. (The value of Progressive Matrices 38, a new form for elementary school.) *Tijdschr. Stud.-Beroepsoriënt.*, 1956, 3, 106-124.—Validity, reliability, and item analysis of the Progressive Matrices, based on data from 509 Belgian children. The test can not be considered to be a test of general intelligence for 10-year old children. We can construct a new form by choosing the 30 items most appropriate for elementary school children, which gives a reliability of .92 and a correlation of .50 with scholastic marks. Additional studies are needed. English and French summaries.—*R. Piret.*

3355. Tromp, J. The influence of nervousness on intelligence test scores. *J. nat. Inst. person. Res., Johannesburg*, 1956, 6, 74-77.—Mental alertness and "nervousness" scores made by 519 pupil pilots in 1947 are studied. "There is a slight but significant tendency for nervousness—as determined in this experiment—to be associated with lower scores on an Intelligence Test."—*J. L. Walker.*

3356. Van Huysse, A. Enkele bevindingen bij een algemeen psychologisch onderzoek in het middelbaar onderwijs, lagere cyclus. (Validity of a psychological examination in the lower degree of a secondary school.) *Tijdschr. Stud.-Beroepsoriënt.*, 1956, 3, 153-170.—Standardization of a battery of Prof. Coetsier's tests of intelligence, attention, and memory on 306 subtests in the lower part of secondary school (age: 12-15 years). Study of the battery by means of correlations, follow-up, and case studies shows that the predictive value of the battery is reliably positive. English and French summaries.—*R. Piret.*

3357. Ward, William Hamlin. Validation of the Selective Service College Qualification Test and relationships with certain non-cognitive variables. *Dissertation Abstr.*, 1957, 17, 891.—Abstract.

(See also Abstracts 2277, 2464, 3279)

EDUCATION STAFF PERSONNEL

3358. Doyle, Louis Andrew. A study of the expectancies which elementary teachers, school administrators, board members and parents have of the elementary teachers' roles. *Dissertation Abstr.*, 1957, 17, 1258-1259.—Abstract.

3359. Ehart, Mary Elizabeth. Cognitive complexity-simplicity in teachers' perceptions of pupils in relation to teaching effectiveness. *Dissertation Abstr.*, 1957, 17, 1028.—Abstract.

3360. French, Grace Marian. College students' concept of effective teaching determined by an analysis of teacher ratings. *Dissertation Abstr.*, 1957, 17, 1380-1381.—Abstract.

3361. Karch, Jacquelin Quigley. Characteristics of women teachers of education in institutions of higher learning in the United States of America. *Dissertation Abstr.*, 1957, 17, 796-797.—Abstract.

3362. Kettig, Thomas Hoskins. Attitudes of Ohio public school teachers toward racial integration. *Dissertation Abstr.*, 1957, 17, 1411.—Abstract.

3363. Kleyensteuber, Carl John. Attitudes and behaviors of groups of school administrators. *Dissertation Abstr.*, 1957, 17, 797-798.—Abstract.

3364. Limbosch, N. Analyse de la fonction d'instituteur par la méthode des incidents critiques. (Analysis of the teacher's function by the method of critical incidents.) *Rev. belg. Psychol. Pedagog.*, 1956, 18, 69-87.—15 primary school principals in Brussels were interviewed using Flanagan's critical-incident technique. 88 positive and 51 negative incidents were noted and are discussed from the points of view of: (1) teaching; (2) education; (3) discipline; and (4) contacts with students, parents, and colleagues. The items are compared with those in the questionnaires of Glenn Frank, Berger, and Cattell.—*R. Piret.*

3365. List, Murray D. An intensive life history study of pre- and post-retirement personality factors of retired college professors. *Dissertation Abstr.*, 1957, 17, 1138.—Abstract.

3366. McCleary, Lloyd Everald. A study of interpersonal influence within a school staff: The development and trial of a method of analyzing influence within established networks of communication. *Dissertation Abstr.*, 1957, 17, 1260.—Abstract.

3367. Pittenger, Owen Ernest. Current practices in the psychological training of elementary teachers. *Dissertation Abstr.*, 1957, 17, 1272-1273.—Abstract.

3368. Price, Monroe Samuel. The susceptibility to distortion of the Minnesota Teacher Attitude Inventory. *Dissertation Abstr.*, 1957, 17, 1267.—Abstract.

3369. Timson, Iris Marie. The relationship of personal characteristics to performance in the initial teaching experience. *Dissertation Abstr.*, 1957, 17, 818.—Abstract.

3370. Tolle, Edwin Randall. A critical analysis of the forced-choice rating technique when used in rating elementary classroom teachers of a metropolitan school system. *Dissertation Abstr.*, 1957, 17, 1021-1022.—Abstract.

(See also Abstracts 2886, 3287, 3324)

PERSONNEL PSYCHOLOGY

3371. Armsen, P. A rough and ready method for computing labour-turnover rates. *J. nat. Inst. person. Res., Johannesburg*, 1956, 6, 83-86.—Formulae for computing labour turnover rates are presented for settings where data are limited. (Number employed at beginning of month, number of discharges, number of new hires.) Variations necessary for "return from leave," determining rate for the year and for the week are included. Examples are given for 2 firms over a 4-year period.—*J. L. Walker.*

3372. Bremer, Johan. Psychiatric disorders in an industrial medicine clientele. *Acta psychiat. Kbh.*, 1956, Suppl. 106, 194-204.—The incidence of mental and nervous disorders in 773 female long-distance-telephone operators in the course of 5 years was 28% (22% in the age group 17-30 years. 40% above age 40.) About a quarter of these retired because of their nervous disability or else were transferred. The remaining number demonstrate a sick-leave time of almost twice the average. Further details are presented and an evaluation made in outline. 18 references.—*R. Kaelbling.*

3373. Grela, John J. 21 executives' wives learn how to help their husbands. *Personnel J.*, 1957, 35, 406-410.—After appraising and counseling 21 executives in a particular company, their wives were interviewed. The men were advised of their strengths and weaknesses, but these were not discussed with the wives. The interviews were confidential and the wives were encouraged to talk about their responsibilities of helping their husbands to achieve their goals and aspirations, and were helped to understand their husbands. It was found that all of the husbands had much the same problems of advancement, health, recreation and retirement, and the wives were concerned about these matters. Some of the executives credited their achievements to their wives who listened, understood and never lost faith.—*M. B. Mitchell.*

3374. Hill, J. M. M. The time-span of discretion in job analysis. *Hum. Relat.*, 1956, 9, 295-323.—Every job has some activities which call for judgment or discretion. The amount of time that a person is permitted by his supervisors to continue using his discretion before being checked upon, is advanced by Jacques as a basis for salary, level of work, and responsibility. The present paper is a methodological examination of the concept in relation to concrete jobs—draftsman, manual operator and researcher. Analysis of discretion is related to presence and nature of review mechanisms and interrelatedness of job components.—*R. A. Littman.*

3375. Livingston, Robert Teviot, & Milberg, Stanley H. (Eds.) *Human relations in industrial research management*. New York: Columbia University Press, 1957. xi, 418 p. \$8.50.—In 2 annual industrial research conferences, some 30 writers consider the problems of management of industrial research. Functions, creativity in problem raising and solving, organization, personalities, specifications, and roles of researchers, obtaining managers and researchers, researcher attitudes toward basic and applied research, communications in research organization, bureaucracy, group involvements, personnel poli-

cies, and remuneration are separately treated. View expressed that the communication system is the key to the most efficient organization of team research; it is not the authority source that matters as much as the quality of the directional effort; bonus incentives for regular research personnel for invention are not recommended.—*W. A. Kerr.*

3376. Pellegrin, Roland J., & Coates, Charles H. Executives and supervisors: Contrasting definitions of career success. *Admin. Sci. Quart.*, 1957, 1, 506-517.—"In exploring the thesis that attitudes and values are basic determinants of career patterns, this paper empirically identifies and analyzes differential definitions of career success held by top-level executives and first-line supervisors. The executive, needing esteem and personal accomplishment, regards the achievement of high position essential for success. The supervisor, with a lower level of aspiration and less mobility drive, defines success in terms of security, respect, and happiness. While the executive is motivated toward continually higher achievement, the supervisor does not establish successively higher goals after attaining his modest ambitions. Implications for current theory concerning job motivation and morale are discussed."—*V. M. Staudt.*

3377. Symons, Noel S. Legal aspects of the hearing loss problems. *Noise Control*, 1957, 3, 49-56.—The legal aspects of industrial hearing loss have recently become important because of the broadening of the concepts of industrial compensation. Among the problems that must be considered are the cumulative effects of noise exposure; the role of age; and the fact that noise-induced hearing loss rarely prevents the worker from performing his duties in the aggravating noise environment. 25 references.—*I. Pollack.*

3378. Weaver, Carl Harold. The influence of some group values on communications in business and industry. *Dissertation Abstr.*, 1957, 17, 1415-1416.—Abstract.

3379. Zauzolkov, F. N. Opyt SSSR po sbliženiiv umstvennogo i fizicheskogo truda. (Experience of the USSR in narrowing the gap between mental and physical work.) *Vop. Filos.*, 1956, No. 5, 32-45.—The Soviet Union is well on its way to eliminating the differences, psychological and other, between mental and physical workers. A history of the effort to bring this about among engineers is given. The secondary schools are criticized for failing to "polytechnicize" fast enough, that is, they are still too much oriented toward preparing students for higher education rather than for industry after graduation.—*I. D. London.*

SELECTION & PLACEMENT

3380. Beezhold, M. A. A study of the prognostic value of health information supplied in a biographical inventory. *J. nat. Inst. person. Res., Johannesburg*, 1956, 6, 78-82.—The biographical inventories obtained at time of induction and the sick reports for 10 months after induction were studied for 130 artisan apprentices in the South African Air Force. The health information given in the biographical inventory has no predictive value.—*J. L. Walker.*

3381. Beyer, David H., & Sells, Saul B. Selection and training of personnel for space flight. *J.*

Aviat. Med., 1957, 28, 1-6.—"The problems of selection and training of space flight crews have been reviewed with tentative proposals based upon present concepts of the characteristics of the early space craft and its probable mission. . . . One conclusion . . . is that space flight is not drastically different from most aspects of aviation which are now familiar. When engineers solve the remaining problems of development, it is expected that personnel will be available with the resources and capabilities to undertake the mission. Space flight may thus be approached as the addition of another dimension to the gradual unfolding of the sciences which have already made magnificent accomplishments in powered flight. However, it is necessary that research and interest in the human factors' aspects keep abreast of progress in engineering."—*J. M. Vanderplas.*

3382. Birnbaum, Abraham H., Armore, Sidney J., & Bolanovich, Daniel J. Prediction of success in radio repair courses. *USA TAGO Person. Res. Br. Tech. Res. Note*, 1955, No. 52. 15 p.—The 10 tests in the Army Classification Battery (ACB) and composites of scores on these tests (including the Aptitude Area composites) were validated against final course grade in 4 samples of 1,019 enlisted men in 3 radio repair courses taught at the Army Signal School. 3-test composites of Electrical and Radio Information Tests with either Mechanical Aptitude or Arithmetic Reasoning Tests were the most promising predictors of course success—cross-validity and validity-generalization coefficients ranging from .66 to .85.—*TAGO*

3383. Birnbaum, Abraham H., Sharp, L. Harold; Armore, Sidney J., Sprunger, James A., & Bolanovich, Daniel J. Prediction of success in ordnance jobs. *USA TAGO Person. Res. Br. Tech. Res. Note*, 1956, No. 58. 12 p.—The 10 tests in the Army Classification Battery (ACB) and composites of scores on these tests were validated against on-the-job ratings of success in 6 jobs for which Army personnel are trained at Ordnance School. Unbiased estimates of validity of the two-test composites with the highest coefficients in each job sample ($N = 94-176$) were obtained in the remaining job samples. Composites involving the Army Clerical Speed Test were the best predictors of success as an Ordnance Storage Specialist (.30-.35); composite of the Automotive Information Test with either the Army Clerical Speed Test (.30-.41), the Arithmetic Reasoning Test (.28-.36), or the Pattern Analysis Test (.34-.35) was the best predictor for Small Arms Repairman, Light or Heavy Artillery Repairman, Machinist, and Welder.—*TAGO.*

3384. Brogden, Hubert E. Efficiency of classification as a function of number of jobs, percent rejected, and validity and intercorrelation of job performance estimates. *USA TAGO Person. Res. Br. Tech. Res. Note*, 1956, No. 63. 18 p.—A more exact and general solution was developed for determining the effect of several factors on the efficiency of assigning men to jobs by means of a classification battery. (The development was limited to conditions involving equal validity, intercorrelation, and variance of the estimates of job performance and equal quotas for all jobs.) Other factors constant, the measure of efficiency used (called the allocation average) varies directly with (1) the validity (R) and

(2) as a function ($\sqrt{1-r}$) of the intercorrelation of the estimates of job performance. The allocation average increases, in negatively accelerated fashion (table is presented), as (3) the number of jobs are increased.—TAGO.

3385. Dozol, F., & Granier, V. **Quelques facteurs influençant les résultats à l'examen psychotechnique.** (Some factors influencing results of the psychotechnical examination.) *Bull. Cent. Etud. Rech. psychotech.*, 1956, 5, 430-449.—In seeking the effect of cultural background, age, etc., of a group of candidates on a psychotechnical examination, the authors had numerous difficulties. The cross-validation also was inadequate. On the other hand the analysis of these difficulties points to the conclusion that the homogeneity of a group of candidates, even if sufficiently large to guarantee the significance of the calculated statistics, can only be apparent. The cross-validation, often neglected by psychologists, is then more than ever necessary but it cannot possibly replace the elaboration of methods of analysis adapted to psychology. English and Spanish summaries.—V. Sanua.

3386. Fischl, Myron A., & Courtney, Douglas. **Evaluation of a shipboard supervisory training program for petty officers.** Philadelphia: Courtney, 1957. ix, 56 p. (Tech. Rep. 19.)—A 10-hour training program for Navy Petty Officers Third Class (PO3) was field-tested aboard two cruisers on operations. Criteria of program effectiveness were: (a) gains on a 15-item test of knowledge about on-the-job training; and (b) a post-program questionnaire tapping opinions of the utility of the program to the PO3. With $N=23$, an analysis of test data indicated improvement significant beyond the .01 level. The questionnaire mean scale value was favorable ($p<.025$). The program was concluded effective and recommendations were made for additional research and for implementation.—M. A. Fischl.

3387. Fischl, Myron A., Datta, Lois-ellin, & Courtney, Douglas. **Development of a shipboard supervisory training program for petty officers.** Philadelphia: Courtney, 1957. vii, 42 p. (Tech. Rep. 17.)—A shipboard program for training Navy Petty Officers Third Class (PO3) in the conduct of on-the-job training was developed on the basis of field and bibliographic research. Field research took place during one month aboard a cruiser on operations. Interviews were conducted with 37 PO3's, 29 officers and higher rated petty officers, heads of departments, division officers, and leading petty officers. Concurrently, a bibliographic review of all relevant training literature was conducted. In the resulting 10-hour program, organization of material, stimulating learner interest, techniques of instruction, selection and utilization of training aids are covered. The last 5 hours (50%) are devoted to practice training. A syllabus and instructor's manual are included in the report. 37 references.—M. A. Fischl.

3388. Fleishman, Edwin A. **Psychomotor selection tests: Research and application in the United States Air Force.** *Personn. Psychol.*, 1956, 9, 449-467.—This article describes psychomotor tests found useful in pilot selection and presents an overview of AF research in psychomotor testing. Such tests add significantly to prediction from paper and pencil tests. Research has identified 11 psychomotor aptitudes and

has shown that the particular combination of aptitudes contributing to performance may change as proficiency increases. 20 references.—A. S. Thompson.

3389. Ford, Frank Bernard. **Long-range prediction of officer achievement in the United States Air Force.** *Dissertation Abstr.*, 1957, 17, 888.—Abstract.

3390. Goldstein, Leon G., Reuder, Mary E., & Karcher, E. Kenneth. **Prediction of success in military police courses.** *USA TAGO Personn. Res. Br. Tech. Res. Note*, 1956, No. 55. 14 p.—The 10 tests in the Army Classification Battery (ACB) and composites of scores on these tests (including the Aptitude Area composites) were validated against final course grade in 7 samples of 1,234 enlisted men in 4 courses taught at The Provost Marshal General's School: Military Police, Advanced Military Police, Disciplinary Guard; and Criminal Investigation. The Aptitude Area I score (composite of vocabulary, arithmetic reasoning, and pattern analysis tests) was among the most valid predictors—validity-generalization coefficients ranging from .60 to .86. An equally promising predictor was the composite of just the vocabulary and the arithmetic reasoning tests—cross-validity and validity-generalization coefficients of .61 to .84.—TAGO.

3391. King, Samuel H., Hoyt, William G., Marks, Melvin R., & Roy, Howard L. **Survey of literature on development of criteria for marginal manpower.** *USA TAGO Personn. Res. Br. Tech. Res. Note*, 1956, No. 54. 13 p.—The literature was surveyed for purposes of evaluating methods of measuring on-the-job usefulness to the Armed Forces of personnel with low mental ability. Paper-and-pencil and performance tests, evaluations by superiors, career (promotions, disciplinary actions, discharges, etc.), job histories, and neuropsychiatric evaluations have been used—usually to compare marginal personnel with so-called normal personnel. It is not possible to conclude whether the differences or lack of differences observed reflect genuine usability or are merely artifacts of the shortcomings of each method. More important, none is based on a direct comparison or 'weighing' of productivity against the costs of maintaining that productivity—a measure believed to be necessary in determining whether selected marginal personnel would be usable in specific military situations. 35 references.—TAGO.

3392. Kirchner, Wayne K. **The attitudes of special groups toward the employment of older persons.** *J. Geront.*, 1957, 12, 216-220.—An attitude scale, comprising 24 items related to employment of older persons, was administered to 7 different groups. The groups were psychologist, guidance and personnel workers, and supervisors. Group similarities and differences were noted.—J. Botwinick.

3393. Marks, Melvin R., & Uhlaner, J. E. **Evaluation of new Armed Forces Vision Tester plates.** *USA TAGO Personn. Res. Br. Tech. Res. Rep.*, 1955, No. 1092. 37 p.—For purposes of validating potential mesopic tests for selecting army night-operation personnel, 256 infantrymen were administered 2 mesopic tests (letter and line resolution) screened in previous studies and 2 reference tests (scotopic modified Landolt ring and photopic letter) in the Armed Forces Vision Tester (modified for

mesopic testing) after 10 minutes of dark adaptation. The criterion was performance on a night field-detection course (examinee-observers required to spot aggressors in various positions at varying distances). Validity coefficients ranged from .25 to .83. The highest coefficient was for the Mesopic Line Resolution Test.—TAGO.

3394. Meyer, Herbert H. An evaluation of a supervisory selection program. *Personn. Psychol.*, 1956, 9, 499-513.—In a follow-up study of a supervisory selection program, the performance ratings of supervisors who had been evaluated under the program were significantly higher than the performance ratings of supervisors who had not been so evaluated before selection. The study also showed that the predictions of the candidates' supervisory success made by the personnel specialists, on the basis of their formal appraisals, had significant validity. Certain of the selection tests showed significant correlations with the job performance ratings, while ratings based on the selection interview alone and the superior's ratings of candidates' potential for up-grading did not show a statistically significant relationship to the criterion ratings of subsequent supervisory success. A survey of the attitudes of participants evaluated and of management personnel revealed that the majority reacted favorably to the use of a systematic selection program of this kind.—A. S. Thompson.

3395. Morton, Mary A., Goldstein, Leon G., Houston, Thomas J., & Bayroff, Abram G. Predicting proficiency of enlisted men of limited ability. *USA TAGO Person. Res. Br. Tech. Res. Rep.*, 1957, No. 1099. 17 p.—Two nonlanguage tests and a verbal test were validated against basic training and on-the-job performance criteria for 2,226 limited ability men (7th grade level and below) reporting for basic training in the Army. Basic training criteria were ratings, a field test and a knowledge of military subjects test. Job performance criteria were performance ratings and type or level of duty to which assigned. Relationships were generally low.—TAGO.

3396. Mundy, John P., Lovelace, Neil R., & Marks, Melvin R. Validation of the Individual Picture Recall Test. *USA TAGO Person. Res. Br. Tech. Res. Note*, 1954, No. 44. 7 p.—The Individual Picture Recall Test (IPRT), DA PRT's 2,690 and 2,692 was designed to identify military inductees with sufficient mental ability who nevertheless failed the Armed Forces Qualification Test (AFQT). The IPRT and AFQT were administered to voluntary applicants for enlistment and to selective service registrants. Mean scores on 2 forms of IPRT were not found to be significantly different. Mean IPRT score of administrative acceptances was significantly higher than those of rejectees. Cutting score on IPRT was established by noting the expected performance on AFQT of men having various IPRT scores.—TAGO.

3397. Parrish, Jack A., Klieger, Walter A., & Drucker, Arthur J. Assessment ratings and experimental tests as predictors of performance in Officer Candidate School. *USA TAGO Person. Res. Br. Tech. Res. Note*, 1955, No. 49. 13 p.—Experimental Army Selection Tests (6 noncognitive measures of leadership and personality and an achievement test of military subject matter) and ratings by

peers and by training officers of performance at a two-week assessment center were validated against criterion measures of performance at officer candidate school (pass vs. fail at OCS, ratings by peers and by tactical officers of success at OCS) in a sample of 208 men who attended an assessment center designed to evaluate OCS applicants. Validity coefficients for the assessment ratings ranged from .46 to .57; for the experimental tests for which keys based on previous item-analyses were available, .12 to .23.—TAGO.

3398. Rettig, Salomon. A preliminary report on the screening of socially responsible attendant employees. *Amer. J. ment. Defic.*, 1957, 61, 478-480.—"This study attempted to investigate the reliability and validity of a forced-choice scale measuring social responsibility, to be used in the hiring of attendant employees. The discriminatory index of the scale was obtained on the basis of choices of responsible and non-responsible attendants, or interagreement among physicians, psychologists, and social workers, in a large state school for the mentally deficient. The Kuder-Richardson reliability of the scale was .70. The correlation between the scale and ratings obtained by supervisors on twenty-four newly hired employees was .51, after the elimination from the sample of three new employees who obtained perfect scores." Additional validation of the scale is required.—V. M. Staudt.

3399. Robinson, John E., Jr., Rosenberg, Nathan; Kaplan, Harry, & Berkhouse, Rudolph G. On-the-job evaluation of the English Fluency Battery for Insular Puerto Ricans. *USA TAGO Person. Res. Br. Tech. Res. Rep.*, 1957, No. 1098. 27 p.—The English Fluency Battery, used to determine English proficiency level of Insular Puerto Ricans prior to their assignment in English-speaking military Army units, was validated against criteria of English proficiency and soldier performance on the job. Coefficients of .58 and .53 were obtained against English proficiency ratings of superior and associates for the two forms of the Battery; against military performance ratings, the coefficients were .38 and .36. Percentages of IPR's expected to be satisfactory and unsatisfactory on the job were computed for a variety of potential cutting scores.—TAGO.

3400. Rosenberg, Seymour. Methods for the rational assembly of aircrews. *J. Aviat. Med.*, 1957, 28, 185-189.—"This report has summarized what is presently known about a number of assembly methods for work groups with particular reference to air crews. Studies have been performed utilizing self-selection among potential crew members wherein they choose each other on the basis of some interpersonal contact. Other studies suggest that high similarity of interests and attitudes and possibly biographic factors would produce more compatible crews. Personality variables, on the other hand, seem to require combinatorial methods more complex than similarity. Finally, there is some evidence that the distribution of technical skills relates to crew performance. From this evidence a number of interesting concepts concerning distribution of technical skills have been developed which may be useful in studying crew assembly in new systems." 25 references.—J. M. Vanderplas.

3401. Schenkel, Kenneth F., Leedy, Herbert B., Rosenberg, Nathan, & Mundy, John P. Evalua-

tion of the Puerto Rican Screening Test (ECFA) against success in training. *USA TAGO Person. Res. Br. Tech. Res. Rep.*, 1957, No. 1097. 23 p.—The Spanish language Puerto Rican Screening Test, ECFA, used in mental screening of Insular Puerto Ricans prior to induction into the Army, was validated against criteria of English fluency and soldier performance in basic training. Under basic training conditions of English instruction interspersed daily with military instruction, the ECFA correlated .73 with a composite English achievement criterion and .52 with a composite soldier performance criterion. Under basic training conditions of 8 weeks of English instruction followed by the normal 16 weeks of training, ECFA correlated .79 with a composite English achievement criterion and .49 with a single soldier performance criterion.—TAGO.

3402. Sharp, L. Harold; Goldstein, Leon G., & Karcher, E. Kenneth. Prediction of success in military police jobs. *USA TAGO Person. Res. Br. Tech. Res. Note*, 1956, No. 59. 9 p.—The 10 tests in the Army Classification Battery (ACB) and composites of scores on these tests were validated against on-the-job ratings of success in jobs for which Army personnel were trained at The Provost Marshal General's School: Military Policeman, Military Police Supervisor, Disciplinary Guard, and Assistant Criminal Investigator. Unbiased estimates in the job samples ($N = 58-94$) were obtained of the validity of 2-test composites with the highest validity coefficients in each job sample and in previous school course samples. The validity-generalization coefficients were below .24, and the composites previously identified for predicting school success were not the same as those identified in the present samples for predicting job success.—TAGO.

3403. Sharp, L. Harold; Reuder, Mary A., & Bolanovich, Daniel J. Prediction of success in the cooking course. *USA TAGO Person. Res. Br. Tech. Res. Note*, 1955, No. 48. 9 p.—The 10 tests in the Army Classification Battery (ACB) and composites of scores on these tests (including the aptitude area composites) were validated against final course grade in 2 samples (N s of 894 and 846) of enlisted men in the army cooking course. The aptitude area III score (composite of vocabulary and arithmetic reasoning tests) was among the most valid predictors of course success. An equally promising predictor was the combination of arithmetic reasoning and shop mechanics tests. Cross-validity coefficients for these composites ranged from .41 to .45.—TAGO.

3404. Sparks, Blair W., & Niess, Oliver K. Psychiatric screening of combat pilots. *U. S. Armed Forces med. J.*, 1956, 7, 811-816.—Combat efficiency predictions made at the time of training were compared with peer-superior ratings and other criteria of combat efficiency obtained during the Korean conflict for 111 pilots. The pilot Stanine test yielded only one significant correlation. Ratings by psychologists during training were all negatively correlated with combat peer-superior ratings (average $-.32$), while ratings of psychologists made during combat were positively correlated with combat peer-superior ratings (average .78). "The results seem to indicate that the psychologists at training level understood neither the nature of combat stress and its effect on personality nor the psychic variables

which constitute probable success or failure."—G. H. Crampton.

3405. Sprunger, James A., & Armore, Sidney J. Prediction of success in cook jobs. *USA TAGO Person. Res. Br. Tech. Res. Note*, 1956, No. 67. 11 p.—The 10 tests in the Army Classification Battery and composites of scores on these tests were validated against ratings of success in army cook jobs. Unbiased estimates in 2 job samples ($N = 237$ each) were obtained of the validity of 2-test composites with the highest validity coefficients in each job sample and in previous school course samples. Although the composites previously identified for predicting cook course success were the same as those identified in the on-the-job samples, cross-validity coefficients among the job samples were considerably lower than in the school samples (.04-.21) as compared to .29-.45).—TAGO.

3406. Sprunger, James A., & Armore, Sidney J. Prediction of success in clerk jobs. *USA TAGO Person. Res. Br. Tech. Res. Note*, 1956, No. 68. 12 p.—The 10 tests in the Army Classification Battery and composites of scores on these tests were validated against ratings of success in Army Clerk jobs. Unbiased estimates in 4 job samples ($N = 223-236$) were obtained of the validity of 2-test composites with the highest validity coefficients in each job sample and in previous school course samples. The validity-generalization and cross-validity coefficients ranged from .23 to .45. The composites previously identified for predicting school success were the same as the best composites identified in the present samples for predicting job success.—TAGO.

3407. Trites, David K., & Kubala, Albert L., Jr. Characteristics of successful pilots. *J. Aviat. Med.*, 1957, 28, 34-40.—"One group, composed of sixty-five subjects, was studied while in combat; for the other group, containing from 200 to 400 subjects, comparisons were made of personal characteristics obtained during training with measures of effectiveness collected several years after graduation. . . . [T]he successful pilot tends to be generally well-adjusted, relatively free from symptoms of illness, adept at social interactions, not unduly concerned with self-advancement, has good flying ability, is easily trained, and seems to be a more competent flyer. Of these characteristics, those which apparently can be assessed with some degree of success during training are: general level of adjustment, flying aptitude and educability, need for self-enhancement, expressed symptom frequency, and likeability."—J. M. Vanderplas.

3408. Trump, James B., Klieger, Walter A., White, Richard K., & Karcher, E. Kenneth. The Army Electronics Information Test. *USA TAGO Person. Res. Br. Tech. Res. Rep.*, 1957, No. 1096. 20 p.—Standardization of the Army Electronics Information Test on a sample representative of a full-mobilization population is described. Replacing two of the ten tests of the Army Classification Battery, the ELI was found to discriminate more effectively at the lower half of the typical enlisted population in the Army than its predecessors. Relationships with the remaining 8 tests of the ACB are slightly higher than those obtained with the replaced tests. Nevertheless, because of better discrimination and higher reliability, the ELI is expected to improve upon the

performance of the replaced tests in classifying enlisted men to electronics jobs.—TAGO.

3409. Woods, Irving A., Armore, Sidney J., Droege, Robert C., & Karcher, E. Kenneth. Prediction of success in personnel and administration courses. *USA TAGO Person. Res. Br. Tech. Res. Note*, 1956, No. 56. 9 p.—The 10 tests in the Army Classification Battery (ACB) and composites of scores on these tests (including the Aptitude Area composites) were validated against final course grade in 2 samples of enlisted men in each of 6 courses ($N=286-569$) taught at The Adjutant General's School: Stenography, Personnel Administration, Personnel Management, Army Administration, Postal Operations, and Machine Accounting. The Aptitude Area IV score (composite of vocabulary, arithmetic reasoning, and clerical speed tests) was the best predictor—unbiased estimates of validity ranging from .58 to .77. However, just 2-test composites of these same 3 component tests were reasonably as valid—cross-validity and validity-generalization coefficients of .54 to .76.—TAGO.

3410. Woods, Irving A., Armore, Sidney J., Sprunger, James A., & Karcher, E. Kenneth. Prediction of success in armament maintenance courses. *USA TAGO Person. Res. Br. Tech. Res. Note*, 1956, No. 66. 13 p.—The 10 tests in the Army Classification Battery and composites of scores on these tests were validated against final course grades in 5 samples of enlisted men in 4 armament maintenance courses ($N=70-118$) taught at Army Ordnance School. The best predictor of success in fire control equipment repair courses was a 2-test composite of the Electrical Information Test and the Mechanical Aptitude Test—unbiased estimates of validity of .40 and .62; in AAA equipment repair a 2-test composite of Pattern Analysis Test and Mechanical Aptitude Test—unbiased estimate of validity of .85. The EI and MA tests predicted success in 2 other AAA equipment repair courses to the extent of .65 in a single sample.—TAGO.

3411. Woods, Irving A., Burke, Laverne K., & Karcher, E. Kenneth. Analysis of army classification battery scores. *USA TAGO Person. Res. Br. Tech. Res. Note*, 1956, No. 60. 15 p.—To provide current normative information on the Army Classification Battery tests and the aptitude area composites of ACB tests, test and area scores were analyzed in a 1% sample of the army enlisted input processed at all reception stations in the United States between 1 November 1952 and 31 October 1953. Means, standard deviations, and intercorrelations of the 10 ACB tests and of the 7 aptitude areas are presented.—TAGO.

3412. Woods, Irving A., Burke, Laverne K., White, Richard K., & Karcher, E. Kenneth. Prediction of success in medical field service school courses. *USA TAGO Person. Res. Br. Tech. Res. Note*, 1957, No. 69. 18 p.—The 10 tests in the Army Classification Battery, composites of scores on these tests, and 3 experimental tests (Path-Tracing, Hidden Figures, and Attention to Detail) were validated against final course grade of enlisted men in each of 8 courses ($N=100-367$) of the Army Medical Field Service School and in one sample of a ninth course ($N=126$). The ACB composites currently used operationally to classify men to these courses were

generally the best predictors in 8 of the 9 courses, with unbiased validity estimates ranging from .73 to .18 in 17 samples.—TAGO.

3413. Woods, Irving A., Reuder, Mary E., & Bolanovich, Daniel J. Prediction of success in the clerical procedures and typing course. *USA TAGO Person. Res. Br. Tech. Res. Note*, 1955, No. 47. 17 p.—The 10 tests in the Army Classification Battery (ACB) and composites were validated against final course grade in 10 samples of 2,329 enlisted men and women in the army clerical procedures and typing course. The aptitude area IV score (composite of vocabulary, arithmetic reasoning, and clerical speed tests in the ACB) was found to be the most valid predictor of course success—median cross-validity coefficient of .75.—TAGO.

3414. Worpell, Donald Frederick. A study of selection factors and the development of objective criteria for measuring success in a co-operative general machine shop training program. *Dissertation Abstr.*, 1957, 17, 1270.—Abstract.

3415. Zeidner, Joseph; Goldstein, Leon G., & Karcher, E. Kenneth. Evaluation of experimental perceptual speed tests. *USA TAGO Person. Res. Br. Tech. Res. Note*, 1956, No. 61. 23 p.—3 experimental perceptual speed tests were evaluated for possible inclusion in the Army Classification Battery (ACB)—the current Army Clerical Speed Test (ACS) measures the perceptual speed factor but is also correlated with the verbal, number, and reasoning measures in the ACB. The samples of Army enlisted men used (N 's of 200 or more) were drawn so as to be representative of Army enlisted input and to take account of practice effect and of variation across installation. Test-retest reliability coefficients were .69-.73. Intercorrelations (mean of .69) among the 3 experimental tests approached unity when corrected for attenuation. Correlation coefficients between the experimental tests and the verbal, number, and reasoning ACB tests (.52-.58) were lower than those between the ACS and these ACB measures (.70-.77). Validity coefficients for the experimental tests against a combat aptitude rating criterion were .21-.29; for the ACS, .30.—TAGO.

3416. Zeidner, Joseph; Goldstein, Leon G., Sprunger, James A., & Karcher, E. Kenneth. Evaluation of Fixed-Wing Selection Tests for predicting success in Army helicopter pilot training. *USA TAGO Person. Res. Br. Tech. Res. Note*, 1956, No. 65. 18 p.—Navy and Air Force tests, originally developed for selecting fixed-wing pilot trainees, were evaluated for predicting the success of officers and enlisted men (N 's from 67 to 243 depending on completeness of the data on measures being analyzed) in the Army rotary-wing pilot training course. Passing or failing the helicopter course appeared to be primarily dependent on proficiency in flying. This flying criterion, in turn, was found to be related (phi coefficients of .85 and .69) to amount of previous flying experience. Therefore, validity coefficients were computed between test scores and the flying criterion with previous experience partialled out. Partial biserial validity coefficients for the most promising tests varied from .04 to .55. The most promising selectors were measures of previous flying experience, mechanical comprehension, practical rea-

soning, and certain personality characteristics.—*TAGO*.

3417. Zeidner, Joseph; Harper, Bertha P., & Karcher, E. Kenneth. Reconstitution of the aptitude areas. *USA TAGO Person. Res. Br. Tech. Res. Rep.*, 1956, No. 1095. 36 p.—Data from 42 studies on the validity of composites of Army Classification Battery tests for predicting success in training and on the job were used in selecting new Aptitude Area composites for the Army personnel classification system. Selection was based on considerations of high differential validity. The 7 new 2-test composites are as effective as the original 10 2- to 4-test composites. Repeated use of the same ACB tests is considerably less; intercorrelations among the new composites are lower. The new areas identify the highest aptitudes of a greater percentage of men, and there is a greater spread in each man's new Aptitude Area scores.—*TAGO*.

(See also Abstract 3430)

LABOR-MANAGEMENT RELATIONS

3418. Foa, Uriel G. A test of the foreman-worker relationship. *Person. Psychol.*, 1956, 9, 469-486.—The author describes a picture test requiring completion of sequences dealing with some foreman-worker situations. The test is designed to provide information concerning: (1) aspects of behavior producing dissatisfaction with self or with others both in the foreman and in the worker; (2) extent of differences between own perception of behavior and norm on one hand and the perception and norm of the other on the other; (3) empathy of the foreman and the worker toward each other in relation to their own behavior and the behavior of the other, both on the normative and actual level. An hypothesized relationship between the test results and such interpersonal attitudes as satisfaction with other, sympathy, and antipathy was confirmed.—*A. S. Thompson*.

3419. Grimala, Walter Stanton. Evaluation of desirable characteristics of industrial supervision as reported by 1,899 hourly-classified workers. *Dissertation Abstr.*, 1957, 17, 1265-1266.—Abstract.

3420. Gurin, Gerald. The relation of social class ideology to attitudes in an industrial organization. *Dissertation Abstr.*, 1957, 17, 1402-1403.—Abstract.

3421. Hitt, William Dee. A statistical analysis of certain factors related to employee morale. *Dissertation Abstr.*, 1957, 17, 1118.—Abstract.

3422. Kitawaki, Masao. (On the quantification of group cohesiveness in an industrial society by sociometric test.) *Jap. J. Psychol.*, 1956, 26, 386-392.—6 indices of group cohesiveness were compared with each other and with the results of sociometric choices and various personality measures on 211 girls living in a workers' dormitory. The indices differed among each other and showed only slight relationship with either the sociometric results or measures of group productivity. English abstract, p. 428-429.—*J. Lyons*.

3423. Peters, George A., & Phelan, Joseph G. Practical group psychotherapy reduces supervisors' anxiety. *Personnel J.*, 1957, 35, 376-378.—

Intensive industrial role playing conducted for supervisors by a qualified psychologist, physician or social worker may relieve anxiety, change attitudes and produce better relationships thus helping to increase production and profits.—*M. B. Mitchell*.

3424. Roach, Darrell E. Factor analysis of rated supervisory behavior. *Person. Psychol.*, 1956, 9, 487-498.—The present study was conducted to determine the independent characteristics of the behavior of first-line supervisors in their daily job performance. First-line supervisors were described by their managers using a 390 item check-list questionnaire. 15 factors emerged from a modified centroid factor analysis: open-mindedness, a general bias factor, personal compliance, job knowledge, direction of employee performance, rewarding performance, company loyalty, cheerfulness, acceptance of responsibility, group spirit, approachability, personal drive, impartiality, poise, and consideration. These dimensions of behavior can serve as a basis for many types of supervisory programs.—*A. S. Thompson*.

3425. Schneider, Eugene V. Industrial sociology: The social relations of industry and the community. New York: McGraw-Hill, 1957. ix, 559 p. \$6.75.—"The purpose of this book is, first, to depict the social structure of the large scale industrial organization, and the relations between this social structure and the individuals who work within the organization. The second major aim is to show how labor unions are related to, and arise from, the social structure and social relations of industry. The third aim is to show how industry (including labor) affects, and is affected by the community (both local and national). "The book includes a purely theoretical section; brief histories of industrial and labor organizations; descriptions of the internal social structure of the factory and labor union; and the relationships between industry and labor on the one hand and the local community, the family, minority groups, social classes, and the state on the other."—*E. G. Aiken*.

3426. Seligson, Harry. Re-thinking the foreman's job. *Personnel J.*, 1957, 35, 372-373; 378.—Up until 25 years ago, foremen were responsible for production and were given the authority to carry out this responsibility. They hired, trained, handled personnel transactions including wages, promotions and demotions. Today the foremen are supposed to be responsible for production but all they can do is try to motivate the workers to produce. The unions, personnel and other departments have deprived them of most of their authority. Over training of the foremen has only frustrated them because they cannot put the theory into practice.—*M. B. Mitchell*.

3427. Wilensky, Harold L. Intellectuals in labor unions: Organizational pressures on professional roles. Glencoe, Ill.: Free Press, 1956. xiii, 336 p. \$6.00.—"The central problem of the study is the role of the expert in the decision-making process in unions. This is approached both from the 'objective' side (the amount and direction of his influence in various areas of union decisions), and the 'subjective' side (the work experience of the expert and his conception of his role). My aim is to describe the activities of various types of experts, identify some of the variables affecting their influence, and to do this in a way that will tell us something about the interaction of or-

ganization and person in the large-scale private organization."—R. A. Littman.

(See also Abstract 3394)

INDUSTRIAL & OTHER APPLICATIONS

(See Abstract 2753)

INDUSTRY

3428. Boies, Lawrence R. **Otological aspects of crash injuries.** *J. Amer. med. Ass.*, 1957, 163, 229-230.—Impairments of hearing and disturbances of equilibrium can prevent normal performance of the automobile driver. Applicants for licensure who have an obvious hearing handicap or who give a history of vertigo should be examined by a physician in order to determine the extent of the disorder and to decide whether they are competent to drive.

3429. Clark, Brant, & Graybiel, Ashton. **The break-off phenomenon: A feeling of separation from the earth experienced by pilots at high altitude.** *J. Aviat. Med.*, 1957, 28, 121-126.—Content analysis of interviews with 137 jet pilots reveals that the break-off effect, "a condition of spatial orientation in which the pilot conceived himself to be isolated, detached, and physically separated from the earth so that he is no longer in contact with it," is a clearly defined phenomenon. Flight experience does not seem to be important for the experiencing of break-off, and "... although this effect appears to be a minor factor in flight efficiency, it may be of some importance in the case of individual pilots ... when coupled with emotional reactions toward flight."—J. M. Vanderplas.

3430. Finch, Glen, & Cameron, Frank. (Eds.) **Symposium on Air Force human engineering, personnel and training research.** *USAF ARDC Tech. Rep.*, 1956, No. 56-58. v. 316 p.—The 34 papers in this volume are a 1955 sample of the United States Air Force aviation psychology research programs in the fields of human engineering, personnel and training research, from 11 Air Force laboratories and 4 civilian contractors.—S. B. Sells.

3431. Fletcher, John L., & Solomon, Lawrence N. **A survey of hearing losses among armor personnel.** *USA med. Res. Lab. Rep.*, 1957, No. 282. v. 40 p.—The hearing of 3,827 armor personnel was tested and related to their age, noise exposure, type of ear protection used, branch of service, and type of hearing loss as a function of noise exposure. Hearing losses (particularly high frequency losses) were found to increase with age and noise exposure. "Positive" aural medical history personnel had greater losses than those with a "negative" history. Pre-exposure tinnitus and tinnitus persisting after exposure were found to be characteristic of personnel with relatively larger hearing losses. Hearing losses among tankers, armor infantrymen, and armor artillerymen did not differ significantly. Results obtained from group audiometry closely approximated results from individual audiometry.—R. V. Hamilton.

3432. Goldberg, Philip L. **A study of the effect of dependency and other personality characteristics on airmen in a familiar crisis situation.** *Dissertation Abstr.*, 1957, 17, 894-895.—Abstract.

3433. Gottsdanker, Robert M. **The ability of human operators to detect acceleration of target motion.** *Psychol. Bull.*, 1956, 53, 477-487.—"The experimental literature on responses to acceleration of target motion was reviewed. One significant observation was that smoothly accelerated motion is generally responded to as if the velocity were constant. Suggestions were made of a basic approach toward obtaining thresholds of acceleration. Examples of studies on constant velocity motion were included in order to develop a systematic graphic method of describing experiments on motion. The phenomenon of velocity constancy of a single moving target was identified and generalized. 21 references.—W. J. Meyer.

3434. Querry, DuPont, III. **Ophthalmological aspects of driver licensing and repeat offenses.** *J. Amer. med. Ass.*, 1957, 163, 227-228.—The degree of visual competence required of applicants for unrestricted driver's licenses in various states should be standardized. Facts are needed as to the benefits that may be anticipated from more consistent and more searching tests. Drivers who have had several accidents should be especially studied. The optical properties of windshields and other details of automobile design that make for distortion, glare, and confusing reflections should be given immediate, critical study.

3435. Guiguet, B., & Fédé, D. **Première étude sur les cabines de pelles mécaniques.** (A first study of cabins of shovel-dredgers.) *Bull. Cent. Etud. Rech. psychotech.*, 1956, 5, 407-423.—A brief survey of shovel-dredgers and their different equipment is given. A study of accidents indicates the importance of the training of personnel. A certain number of suggestions are made to the designers and the type of research which has to be undertaken which might have some effect upon the design of certain parts of the cabin. English and Spanish summaries.—V. Samua.

3436. Hauty, G. T., Payne, R. B., & Bauer, R. O. **Effects of normal air and dextro-amphetamine upon work decrement induced by oxygen impoverishment and fatigue.** *J. Pharmacol.*, 1957, 119, 385-389.—Performance of a group of airmen administered d-amphetamine was compared with a placebo group on a 4-hour compensatory pursuit task. Both groups breathed 12% oxygen during the first, second, and fourth hours, and 21% oxygen during the third hour. During the first 2 hours, performance of the d-amphetamine group remained at its initial level, while that of the placebo group declined. In the third hour, proficiency did not decline in either group. The normal air breathed during the third hour postponed the proficiency degradation which would otherwise have occurred due to hypoxia and fatigue.—G. A. Heise.

3437. Henderson, S. T. **Symposium on screen viewing: III. The viewing of radar screens.** *Trans. Illum. Engng Soc., Lond.*, 1956, 21, 216-221.—A discussion is given of radar screens and their uses, and a description is given of a system which "has been developed by which ambient lights of near-white appearance, good colour rendering properties and reasonable intensity can be used without loss of visibility in the cathode-ray tube presentation. A combination of fluorescent lamps is used covering almost the whole visible spectrum apart from a band in

the region where the cathode-ray tube screen itself emits. A colour filter in front of the cathode-ray tube passes the screen emission but absorbs that from the lamps, so that a minimum of external light reaches the screen. The perfect combination of lamps and filters has not yet been achieved, but several versions of the system have been investigated and some used successfully.—*R. W. Burnham.*

3438. Herbert, Marvin J. The speed and accuracy with which six linear arm movements can be visually positioned from two different control locations. *U.S.A. med. Res. Lab. Rep.*, 1957, No. 260. ii, 14 p.—Arm movement data of 18 subjects taken from a precise experimental apparatus was subjected to analysis of variance to determine the influence of direction of movement and location of control on the speed and accuracy with which a visual-positioning task can be accomplished. Results indicate arm movements in the vertical axis are faster and more accurate than in the other two axes ("left-right" and "push-pull"). No differential effect could be ascribed to the two control locations.—*R. V. Hamilton.*

3439. Johnson, Duane Morton. A study of responses to work activities check list to determine functional job inter-relationships. *Dissertation Abstr.*, 1957, 17, 1381.—Abstract.

3440. Knopp, Leslie. Symposium on screen viewing: I. The viewing of cinema screens. *Trans. Illum. Engng Soc., Lond.*, 1956, 21, 199-205.—International standardization of cinema screen luminance is reviewed and compared with British standards based on "a large number of subjective tests of skilled and experienced observers, viewing normal release prints of various densities and contrasts of both colour and black-and-white [photographic] subjects." Observations are summarized on visibility of grain, appearance of flicker, incidence of glare, comments of observers, and "quality of projection" (luminance).—*R. W. Burnham.*

3441. Levinson, Harry. The illogical logic of accident prevention. *Menninger Quart.*, 1957, 11 (1), 19-25.—The human reasons for accidents appear illogical only if we try to understand them from the point of view of conscious, systematic thinking. Their logic is actually that of the person's unconscious, but most of our safety education efforts are directed to rational thinking. Few of the people responsible for safety programs have any familiarity with psychological knowledge about motivation. The drive to aggression is summarized and its implications for the safety movement are indicated.—*W. A. Varvel.*

3442. McFarland, Ross A. Psychological and psychiatric aspects of highway safety. *J. Amer. med. Ass.*, 1957, 163, 233-237.—Understanding and possibly controlling the human factors of drivers as well as their equipment and environment provide the most promising areas to prevent automobile accidents. Though no single characteristic of drivers has yet been isolated that appears to be outstanding in accounting for the large proportion of accidents on the highways, there do appear to be several etiological groupings. One of these is the accident repeater, who may manifest general instability in society, or even possess a mild psychopathic personality.

3443. Nicely, Patricia E., & Miller, George A. Some effects of unequal spatial distribution on the

detectability of radar targets. *J. exp. Psychol.*, 1957, 53, 195-198.—"When targets are much more probable in one area of a radar display than in another, there is a decline in sensitivity for the low-probability area and no decline for the high-probability area."—*J. Arbit.*

3444. Nixon, R. D. Symposium on screen viewing. II. The viewing of television screens. *Trans. Illum. Engng Soc., Lond.*, 1956, 21, 205-216.—A discussion is given of "the available contrast ratio on television screens of the aluminised and non-aluminised types, and indicates the reduction in contrast due to direct illumination of the dark portions of the picture by the bright portions, halation in the glass envelope and external illumination. The results show that picture contrast ratio may be reduced by these effects from about 150:1 under the best conditions to 25:1 under typical domestic viewing conditions. Experiments in television picture viewing with illuminated surrounds are described and curves given relating picture luminance with the surround luminance giving greatest viewing comfort for three sizes of surround."—*R. W. Burnham.*

3445. Poulton, E. C. On the stimulus and response in pursuit tracking. *J. exp. Psychol.*, 1957, 53, 189-194.—Attempted to determine the visual information S requires in pursuit tracking and the nature of his response with and without this information. Tracking was most accurate when both the input and response pointers were visible. Corrections for misalignment followed only a minority of the glimpses of the invisible pointer. In some cases tracking with eyes closed is as accurate as tracking with eyes open. A fast simple input produces a continuous cyclical response only infrequently corrected to match the input.—*J. Arbit.*

3446. Roebuck, J. A., Jr. Anthropometry in aircraft engineering design. *J. Aviat. Med.*, 1957, 28, 41-56.—An integrated program and approach to the problem of utilization of anthropometric data in design of aircraft is outlined. Methods of translation of anthropometric data to tabular form and estimation of space requirements are described and examples given. 28 references.—*J. M. Vanderplas.*

3447. Simon, C. W., Slocum, G. K., Hopkins, C. O., & Roscoe, S. N. Altimetry studies: I. An experimental comparison of three pictorial and three symbolic displays of altitude, vertical speed, and altitude commands. Culver City, Calif.: Hughes Aircraft Co., 1956. iv, 14 p. (Tech. Memo. No. 425).—Pictorial displays of aircraft altitude, vertical speed, and altitude commands proved superior to symbolic displays in terms of reaction time, errors, and preference. The relationship between pilot experience and response to circular displays is reported. 17 references.—*R. Tyson.*

3448. Vibert-Durain, Genèvieve, & Guiguet, B. Le bruit. Sa mesure et ses effets. (Noise, its measure and its effects.) *Bull. Cent. Étud. Rech. psychotech.*, 1956, 5, 467-496.—A survey of the literature indicates that noise may have deleterious effects. It may reduce hearing sensitivity, may cause general effects on the organism such as asthenia, reduces production and further causes painful sensations which may result in maladjustment of the worker. Doctors, engineers and psychologists should consider the prob-

lem when machines are built. 160 references.—*V. Sanua.*

3449. Wolf, William S. **Operational analysis of the rough-terrain fork lift truck.** *U.S. Army, Cm. Res. Developm. Cent. Environ. Protect. Res., Tech. Rep.*, 1957, EP-42. iv, 27 p.—This study analyzes the factors that help the rough-terrain fork lift truck operator do his job with speed, high quality of performance, comfort, health, and safety. Its purpose is to inform human engineering research personnel and equipment designers about the difficulties the users are having with various rough-terrain fork lift trucks. Some of the factors considered are: the job to be performed, personnel and performance problems in the use of existing equipment, and special characteristics of operating personnel. Specific problem areas have been defined and recommendations for further human engineering and mechanical studies presented for both immediate improvements and for broader future changes. General findings are that existing and proposed experimental rough-terrain fork lift trucks are too complicated and are not designed to permit maximum operating efficiency.

3450. Zeller, Anchar F., & Moseley, Harry G. **Aircraft accidents as related to pilot age and experience.** *J. Aviat. Med.*, 1957, 28, 171-184.—Data on air force accidents occurring during the last six months of 1953 are summarized. Limited experience or younger age are associated with high accident po-

tential. Advancing age or increased experience are associated with a decrease in accidents. An upsweep is found in accidents as age increases when jet fighter accidents are examined. Gains in the prevention of accidents are hypothesized to be possible by "... reducing the accidents of the younger, less experienced pilots, especially those flying jet aircraft." Suggestions for accident programs and cautions to be exercised in interpreting accident data are given.—*J. M. Vanderplas.*

(See also Abstracts 2446, 2567)

PROFESSIONS


3451. Bregstein, S. Joseph. **Psychologic aspects of dental practice.** *J. Amer. Soc. psychosom. Dent.*, 1957, 4(2), 57-60.—"A more complete understanding of the total subject of personality is advocated for dentists who are in close contact with patients who display aberrations." Brief case excerpts are given.—*J. H. Manhold, Jr.*

3452. Davis, Robert Campbell. **Commitment to professional values as related to the role performance of research scientists.** *Dissertation Abstr.*, 1957, 17, 1401-1402.—Abstract.

3453. Stoltz, Robert Edward. **A study of productivity in a research setting.** *Dissertation Abstr.*, 1957, 17, 1122.—Abstract.

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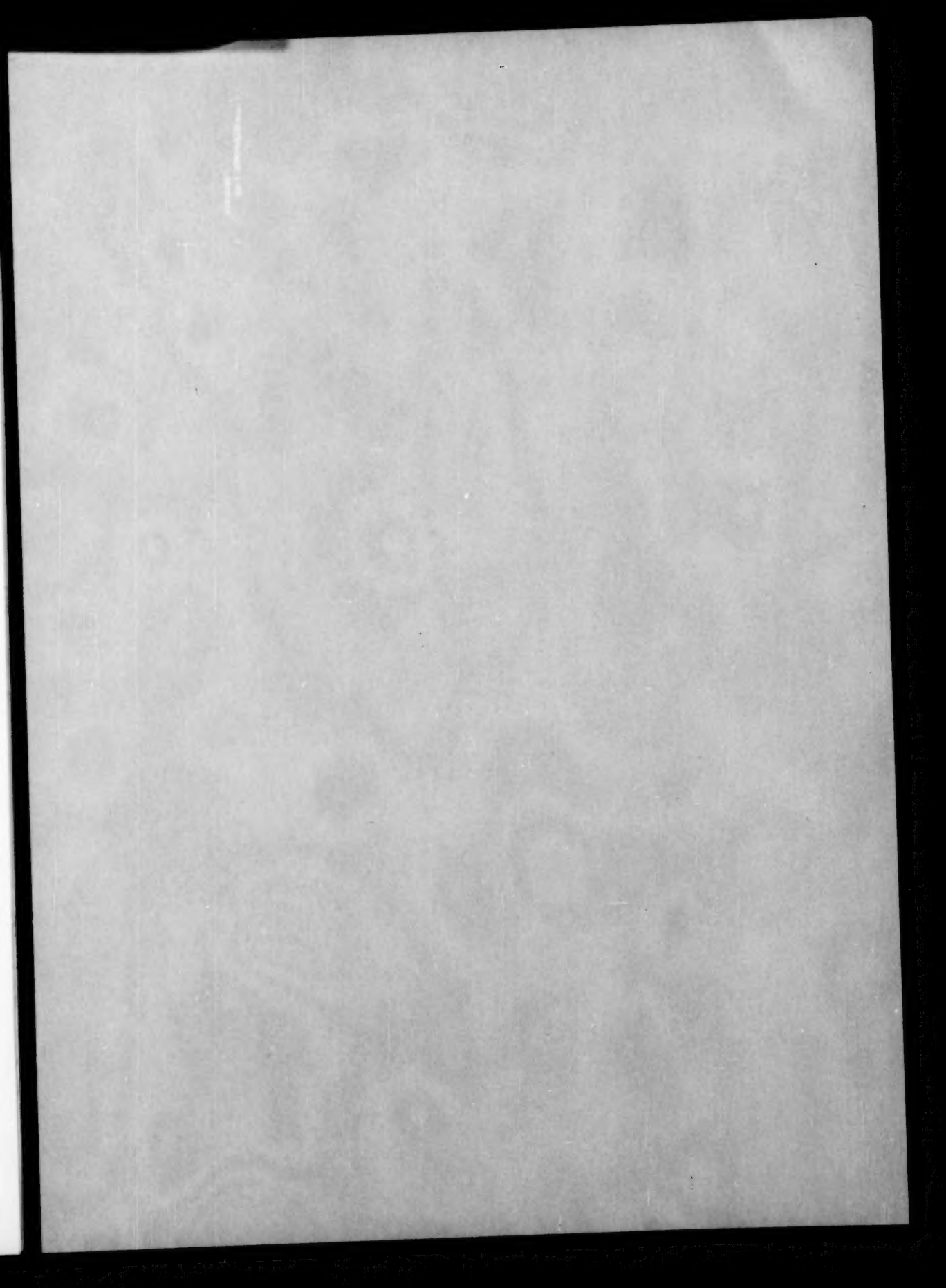
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